


I am a Navigation Authority for the purposes of section 21 of the Water Supplies Act 1942. I am very familiar with the water supply requirements of Kildare, Laois, Offaly and Westmeath, Meath and Dublin Counties. Since 2001 i have observed and documented the over abstraction of water from the catchment of the inland Navigation system and the consequences for the increased discharge from several sources. My submission to your development plan is that the people of Offaly and the region are entitled to the benefit of the once in several generations opportunity to implement the long term plan for the cutaway bogs which was agreed with the European Commission in 1994. I attach for your reference the complete Memorandum of Uderstanding and direct you to Appendix 8 of the Memorandum which deals specifically with the 26,000 hectares which was secured by the Commission for the benefit of the public when they paid 26 Million Euro.





**Department of Communications,  
Marine and Natural Resources**

**OPERATIONAL PROGRAMME FOR  
ECONOMIC INFRASTRUCTURE  
1994 –1999  
IRELAND**

**FINAL REPORT**  
*(Original print 17-02-03)*



**EUROPEAN REGIONAL  
DEVELOPMENT FUND**

**Updated 26 March 2003**

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# **Preface to EIOP**

## **Economic Infrastructure Operational Programme IRELAND 1994-1999**

Pursuant to Commission Decision C(94) 1971/2 of 29 July 1994 (as amended by C(97) 1945 of 8 July 1997; by C(1998) 2115 of 23 July 1998; by C(1999) 3779 of 26 November 1999 and by C(2000) 1292 of 8 June 2000), concerning the granting of assistance from the European Regional Development Fund (ERDF), to an Operational Programme for Economic Infrastructure under the Objective 1 Community Support Framework for structural assistance for Ireland.

**ERDF : 94.04.09.005  
ARINCO : 94.IR.16004**

# CHAPTER 1

## Delivery of the EIOP

## 1.1 Background to EIOP

1.1.1 This is the Final Report of the Economic Infrastructure Operational Programme (EIOP), 1994-1999 for Ireland.

1.1.2 The EIOP was approved by the European Commission on 29 July 1994 and it was officially launched and published on 30 September 1994.

1.1.3 The EIOP, as published, provided for investment of €320 million in energy, postal and telecommunications infrastructure and services, of which €108 million was to be provided by the European Regional Development Fund. While the title of the Programme refers to the years 1994-1999, the European Commission in a Decision of 26 November 1999 extended the final date for taking account of expenditure under the Programme's Measures to 31 December 2001.

1.1.4 By way of introduction, the EIOP stated that it was “...an application for assistance in the form of an Operational Programme, the provision of which are consistent with the EU Community Support Framework for IRELAND 1994-1999”. The EIOP went on to state that the “...programme is designed to assist in providing infrastructural support for EU and National economic objectives, particularly the achievement of further substantial progress towards the National and EU goals of economic and social cohesion and improvement of the competitiveness and efficiency of the economy by investing in upgrading economic infrastructure on a basis which best supports the improvement of economic activity. Furthermore energy efficiency initiatives in this programme will help make significant progress towards the EU objective of improving the efficiency of final energy demand”.

1.1.5 The EIOP was divided into three sub-programmes:-

- The first concerning *energy investments* which contribute to the cost effective supply and consumption of indigenous and imported fuels;

- The second concerning *communications investments* which are necessary to maintain and develop efficient postal and telecommunications services to industry and consumers in general, and
- The third concerning *technical assistance expenditure*, which is necessary for appropriate management, control, planning and appraisal of the Operational Programme as a whole.

1.1.6 Details of activities and developments under each of these Sub-Programmes are set out later in Chapter 2, Chapter 3 and Chapter 4 of this Final Report. Within each of these Sub-Programmes, a number of Measures addressed specific areas of energy, postal and telecommunications infrastructure and services. In total there were eleven Measures at the close of this Operational Programme.

1.1.7 The EIOP Secretariat, which is the Monitoring Authority for the EIOP, was formerly located in the Planning Unit of the Department of Public Enterprise. It was transferred to the Department of Communication, Marine and Natural Resources in July 2002.

## **1.2 Economic Context for EIOP**

1.2.1 When the Operational Programme was published in September 1994, annual economic growth in Ireland was 5.8 per cent, as measured by Gross Domestic Product (GDP). At that stage the unemployment rate was quite high at 14.7 per cent. Low inflation and fiscal consolidation were underpinning low interest rates and exchange rate stability and sustainable growth in investment, output and employment. As a consequence, the period from 1994 to 2001 was one of unprecedented, sustained growth. In that period, GDP grew by over 86 per cent at constant prices (i.e., having excluding price changes).

1.2.2 The substantial growth that was recorded over the period was generated by a combination of productivity growth (i.e., increased output per person at work) and

increased numbers at work. In 1994, the number at work had been around 1.2 million. By 2001, this had increased to over 1.7 million; half of this increase was accounted for by the increased number of women at work. As a consequence, women's share of employment increased from 37 per cent of total employment in 1994 to over 41 per cent in 2001. The overall increases in employment led to the unemployment rate falling dramatically over the period of the Operational Programme, from 14.7 per cent in 1994 to just 3.8 per cent in 2001.

1.2.3 The growth in exports has been especially marked over the period. Since 1994, the volume of exports increased by 184 per cent. The other demand components making up GDP also rewarded considerable increases over the period. Investment grew in real terms by over 130 per cent; personal consumption grew by 59 per cent and public expenditure grew by 40 per cent. As regards imports of goods and services, they showed a growth in real terms of 170 per cent between 1994 and 2001.

1.2.4 The experience of the different sectors of the economy has demonstrated quite different growth rates over the years 1994 through 2001. Agriculture, forestry and fishing rose by just 10 per cent in real terms over the period. By contrast, the output of industry (including building) rose by more than 140 per cent. There was an especially strong increase of over 107 per cent in the real output of distribution, transport and communications. All services (including public administration) grew in real terms by 46 per cent over the period 1994 through 2001. As a consequence of the different growth rates, the contributions of the different sectors changed over the period, with industry showing an increase of 10 percentage points in its share of national output. The shares of national output for the other sectors also changed over the period, by between 2 and 5 percentage points, in some case with increases, in other case decreases - see Table 1.1.



**TABLE 1.1: SECTORAL SHARES OF GROSS DOMESTIC PRODUCT \***

<b>Sector of Origin</b>	<b>1994 Shares</b>	<b>2001 Shares</b>
Agriculture, forestry and fishing	8.5%	5.0%
Industry (including building)	35.6%	45.8%
Distribution, transport and communication	15.8%	17.6%
Public administration and defence	5.3%	3.2%
Other services**	34.8%	28.3%
<u>Gross domestic product at constant factor cost</u>	100%	100%

\* Source: Central Statistics Office

\*\* Including rent, adjustment for financial services and statistical discrepancy.

1.2.5 The consumption of personal income also showed a considerable increase in the years 1994 through 2001. As mentioned in Paragraph 1.2.3 above, such consumption grew by 59 per cent in real terms. Two items of particular relevance to the EIOP also recorded growth over the period – ‘communication’ and ‘fuel and power’. In the case of communication, the real growth from 1994 to 2001 was over three-fold. In the case of fuel and power, the growth was more modest, at 23 per cent in real terms. In the same period, there was a considerable improvement in overall energy intensity, as measured by the ratio of Total Primary Energy Requirement (TPER)) to GDP (at constant 1990 prices). The TPER/GDP ratio was reduced from a 1993 value of 83 (Base Year 1980, value 100) to a 2001 estimate of 63, a reduction of twenty percentage points in the ratio compared to a 1999 target value of 75.

### **1.3 Decisions of the European Commission on EIOP**

1.3.1 The *first* European Commission Decision (C(94)1971/2), approving the Economic Infrastructure Operational Programme, was taken on 29 July 1994. Over the period of the Programme it was necessary to seek revised Commission Decisions to take into account re-profiling of expenditure; the Mid-Term Review of the Operational Programme; the accommodation of additional funding under the “deflator” process and the addition of new Measures to the EIOP. The European Commission took four subsequent formal Decisions over the life of the EIOP. The

text of all these Decisions is reproduced in **Appendix 1**. The detailed financial tables accompanying the different Commission Decisions are on file in the EIOP Secretariat.<sup>1</sup>

1.3.2 The *second* Decision was taken on 8 July 1997 when the Commission formally approved decisions that had been taken by the EIOP Monitoring Committee. The Decision included the allocation of an additional €1.678 million equally between the Telecommunications Measure and the Postal Measure. It also formally agreed a revised financial plan for the EIOP.

1.3.3 The *third* formal Decision was taken by the European Commission on 23 July 1998. This Decision endorsed the decision taken by the CSF Monitoring Committee, at its meeting of 29 July 1997 to approve the Mid Term Review of the Community Support Framework for Objective 1 in Ireland. It provided for the transfer of €2 million of Community assistance from the EIOP (specifically from the Telecommunications Measure) to other operational programmes within the CSF for Objective 1 in Ireland and reallocated €10 million from the Telecommunications Measure to a new Measure entitled Information Society – Broadband Technology within the EIOP. This Decision also formally approved a revised financial plan.

1.3.4 The *fourth* formal Decision was taken by the European Commission on 26 November 1999. The EIOP Monitoring Committee took a number of decisions in the course of the second half of 1998 and first half of 1999 to accommodate “1998” funds and to reprofile expenditure. In particular it decided on 29 March 1999 to reallocate €250,500 from the Technical Measure to a new Measure entitled Information Society (Business Awareness) and to approve the extension of the final date for taking account of expenditure to 31 December 2001. The European Commission also formally approved a revised financial plan as part of this Decision.

1.3.5 The *fifth* formal Decision was taken by the European Commission on 8 June 2000. In particular, it approved the inclusion of an Electronic Commerce Infrastructure Measure under the Communications Sub-Programme and the re-allocation of €2.5 million to this Measure from the Broadband Technology Measure

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<sup>1</sup> For facility, the euro (€) Symbol is used throughout this Final Report to embrace both ‘ecus’ and ‘euros’.

within the same Sub Programme. It also approved the redistribution of funding from the Energy Sub-Programme to the Communications Sub-Programme of €2.4565 million and from Technical Assistance Sub-Programme to the Communications Sub-Programme of €0.419312. The European Commission also formally approved a revised financial plan as part of this Decision.

1.3.6 The overall adjustments to the financial plans taken by the European Commission in its different Decisions, in relation to the EIOP, are summarized in Table 1.2 below:

**Table 1. 2: Amendments to Financial Plan of EIOP**

<b>European Commission Decisions</b>	<b>Base Allocations € million</b>	<b>Net Adjustment € million</b>	<b>New Allocation € million</b>
C(94) 1971/2 of 29 July 1994	108.000000	Original	Programme allocation
C(97) 1945 of 8 July 1997	108.000000	+1.678000	109.678000
C(1998) 2115 of 23 July 1998	109.678000	-1,156749	108.521251
C(1999) 3779 of 26 November 1999	108.521251	+2.767000	111.288251
C(2000) 1292 of 8 June 2000	111.288251	No adjustment to allocation	111.288251
Change over period of EIOP	108.000000 original allocation	+3.288251	111.288251

1.3.7 Over the course of the Economic Infrastructure Operational Programme, EU funds have been drawn down on a regular basis. The following table shows the drawdown over the programme, prior to the final claim, for the ERDF funds involved, in accordance with the decision of 8 June 2000:

<b>Year</b>	<b>ERDF Aid €</b>
1994	1,877,963
1995	8,786,838
1996	13,416,651
1997	7,924,997
1998	13,956,051
1999 (20% of €65,325,751)	52,260,601
<b>TOTAL:</b>	<b>98,223,101</b>

The individual EU receipts which make up this total were converted at the exchange rates in force on the date of receipt, giving the total IR£76,292,238.82.

## **1.4. Monitoring and Evaluation of the EIOP**

1.4.1 The Economic Infrastructure Operational Programme was subject to ongoing monitoring and evaluation from its commencement.

1.4.2 The Monitoring Committee for the Operational Programme consisted of representatives from areas who had a particular interest in the different dimensions of the energy and communications sectors embraced by the Operational Programme, and representatives of relevant Government Departments. It also consisted of representatives for the Social Partners, the Employers and the Trade Unions. The European Commission was also represented on the Committee. The composition of membership is contained in **Appendix 2** to this Final Report.

1.4.3 The Committee met on twelve occasions on the following dates

- 15 December 1994
- 3 April 1995
- 15 September 1995
- 29 March 1996
- 26 September 1996
- 16 January 1997 \*
- 20 March 1997
- 29 September 1997

- 30 March 1998
- 28 September 1998
- 29 March 1999
- 11 October 1999

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\* Special meeting to consider the mid-term review of the EIOP

1.4.4 The EIOP Monitoring Committee first met on 15<sup>th</sup> December 1994 and then met twice a year in the years 1995, 1996, 1998 and 1999. In the case of 1997 the Committee met on three occasions; there were two ordinary meetings and one special meeting to adopt the Committee's Report to the CSF Monitoring Committee (see Section 1.5 below).

1.4.5 The EIOP Monitoring Committee was apprised of its duties and responsibilities by the EIOP Secretariat, and the European Commission representation, at its first meeting on 15 December 1994. The duties and responsibilities of the EIOP Monitoring Committee were consistent with those published in Section 4.3 of the Community Support Framework, 1994-99, for Ireland (European Commission, 1994).

1.4.6 In meeting its responsibilities, the EIOP Monitoring Committee took numerous decisions in the course of its existence; the majority were taken at meetings of the Committee and a number were taken by written procedure. The formal Decisions of the European Commission, in turn, reflect the decisions of the EIOP Monitoring Committee. In particular the decisions of the EIOP Monitoring Committee involved re-profiling of expenditure; the Mid-Term Review of the Operational Programme; the accommodation of additional funding under the "deflator" process and the addition of new Measures to the EIOP. The adjustments made to the amounts of EU Funds for the EIOP, arising from the Monitoring Committee's Decisions, are set-out in the excel table "EIOP Additions and Re-allocations" at **Appendix 3**.

1.4.7 The specific decisions, that were taken by the Monitoring Committee, in relation to individual Measures of the EIOP, are discussed in the relevant sections of Chapter 2, Chapter 3 and Chapter 4 of this Final Report. They deal with the specific

Measures in the areas of energy, postal and telecommunications, as well as the Measures embraced by Technical Assistance.

1.4.8 The EIOP Monitoring Committee set up two sub-committees, in the course of the life of the Programme. They were the Technical Assistance Sub-Committee and a special sub-committee, the ‘Truncated’ Monitoring Committee, set up to deal with the development of infrastructure for the “Information Society” in Ireland.

- Chapter 4 deals with the *Technical Assistance Sub-Committee* which was established in December 1994 to evaluate requests for funding under the Technical Assistance Sub-Programme of the EIOP and to bring such requests to the EIOP Monitoring Committee for approval. It was set up specifically to ensure that requests for funding would be processed in a streamlined and responsive manner.
- Chapter 3, Section 3, relating to the Information Society Broadband Technology Measure deals with the ‘Truncated’ Monitoring Committee, which embraced the development of infrastructure for the “Information Society.” It was established in May 1997 to examine proposals for telecommunications infrastructure, from the public and private sectors, on the basis of “spare” ERDF funds within the Telecommunications Measure of the EIOP. It was considered by the plenary Monitoring Committee that such a small sub-committee would be more manageable than the plenary Monitoring Committee for the work involved in project selection, as well as ensuring that conflicts of interest were minimised to the greatest extent possible. The latter requirement was reinforced by the request to Members of the Monitoring Committee, who were being nominated to the special sub-committee, to declare any personal interest in any company providing telecommunications services or infrastructure in the country.

1.4.9 Over the life of the Programme, the EIOP Monitoring Committee produced seven Annual Reports. They relate to the years 1994, 1995, 1996, 1997, 1998, 1999 and 2000. The Annual Reports for the two most recent years – 1999 and 2000 – are available on the Internet at <http://www.irlgov.ie/tec/publications>.

## **1.5 Mid-term review of EIOP**

1.5.1 The Community Support Framework, 1994 –1999, included provision that all Operational Programmes would be subject to a mid-term review, to be undertaken with assistance of independent evaluators, agreed by the Programme Monitoring Committees. The purpose of such reviews was:-

- to support the Monitoring Committee in discharging their responsibilities of ensuring that the objectives of the Operational Programme were achieved efficiently and effectively.
- to identify such corrective actions that may be necessary in the form of adjustments to the implementation of measures to ensure that the objectives of the Operational Programme were achieved.

1.5.2 Indecon International Economic Consultants were engaged in the course of 1997 by the EIOP Monitoring Committee to assist the Monitoring Committee in their work. The EIOP Monitoring Committee completed a thorough review of the Economic Infrastructure Operational Programme, with the assistance of the Consultants.

1.5.3 The Report from Indecon International Economic Consultants was initially considered by the EIOP at a special meeting of the Monitoring Committees on 16 January 1997. It was given further consideration at the meeting of the Monitoring Committee on 20 March 1997. The Committee's considered views were supplied to the CSF Monitoring Committee. The resultant report agreed by the Monitoring Committee on the mid-term review is reproduced at **Appendix 4**.

1.5.4 Following its consideration of the EIOP mid-term review, the CSF Monitoring Committee approved the reallocation of €10 million aid from savings, within the Telecommunications Measure of the EIOP to fund a new Measure from Broadband Telecommunications to assist the development of the Information Society. The provision of aid was conditional in that all of the players, including the private sector, would be allowed to participate in tendering for the grant on the basis of criteria that were to be set down in advance.

1.5.5 The CSF Monitoring Committee also addressed two other EIOP projects - the new peat fired station and the renewable energy project (waste to energy station). The Committee decided that these projects should be included in the reserve list of projects, which were to be reviewed in the Spring of 1998, “...in respect of which consideration will be given to decommitting funds...if sufficient funds is not achieved”. The first project, the Peat Fired Station, made good progress in the ensuing period and was successfully completed within the time-scale set under the EIOP. This project is discussed in Section 2.1 of Chapter 2 of this final report. In the case of the second project, the EIOP Monitoring Committee had earmarked €9.3 million aid within the Renewable Energy Measure for the development of a “waste to energy” station. An application for grant assistance was submitted to the European Commission in respect of the provision of ERDF aid for a “waste-to-energy” station. The application was accompanied by a Socio-Economic Cost Benefit Analysis, as required by the Commission. The European Commission engaged independent consultants to examine the Cost Benefit Analysis and to advise on the suitability of funding for the project in the context of the Dublin Waste Management Strategy Report. In the event, the Commission indicated that it is not prepared to sanction ERDF grant assistance for the project. As a consequence of the Commission’s response the “waste-to-energy” project was withdrawn from the EIOP following consideration by the EIOP Monitoring Committee.



## 1.6 Community Structural Assistance and Employment

1.6.1 In the course of 1996, the European Commission requested each Operational Programme Monitoring Committee to discuss Community Structural Assistance and Employment and to report on the outcome of discussions to the CSF Monitoring Committee. The EIOP Monitoring Committee responded to this request. The paper that was approved by the Monitoring Committee and submitted to the CSF Monitoring Committee is reproduced at **Appendix 5**.

1.6.2 It was the Commission's desire that all those involved in implementing structural policies should step up their efforts to give operations financed by the Structural Funds a greater employment content. Monitoring Committees were accordingly asked to identify adjustments, within current programming arrangements, which might increase the impact on growth and the impact of growth on employment.

1.6.3 The EIOP Monitoring Committee highlighted the fact that the implementation of the Measures of the EIOP helped to improve employment opportunities through:-

### *Direct employment*

- the construction and physical implementation phases of the different measures under the Operational Programme.

### *Indirect employment*

- ensuring that the postal, energy and telecommunications sectors provide competitive, efficient and effective services and thereby stimulating employment in the wider economy.
- investments undertaken under the OP offering the opportunity for closer integration with other CSF investments aimed at offsetting the economic impact of peripherality and under-development.

1.6.4 The EIOP Monitoring Committee noted that the employment impact of the investments under the Operational Programme was not confined to Ireland solely. As

well as the wider geographic impact, there was also the wider trans-sectoral impact. The investments under the Operational Programme had the potential to lever a number of down-stream benefits, which, while difficult to quantify, can make a positive contribution towards increased employment in the economy. The Monitoring Committee also noted that the investments undertaken under the EIOP contributed to sustained economic growth, and to employment creation at a local and regional level. However, the scale of this positive contribution reflected the fact that the investments being undertaken under the Operational Programme were relatively small compared to the total investments being undertaken in the postal, energy and telecommunications networks in Ireland during the programming period.

1.6.5 The expenditure on the peat fired station (Peat Generation Measure) and the Renewable Energy Measure of the **Energy Sub-Programme** of the Operational Programme, recognised that there were positive externalities associated with these developments - local and regional development, employment and income generation, the adoption of new technologies and the use of indigenous sources. Further benefits were expected to arise in line with the experience and expertise garnered from participation in the renewable energy projects in the home market and as an export commodity. In addition, the Energy Efficiency expenditures provided scope to lead to significant direct and indirect employment as result of increased competitiveness, increased spending power, and a switch to more labour-intensive energy efficiency technologies. Here, too, further benefits can accrue as awareness of the benefits of energy efficiency is increased, and as a pool of expertise in this area is developed.

1.6.6 The investments under the **Communications Sub-Programme** have been producing in-direct benefits. The availability of new advanced telecommunications services throughout the country certainly assists regional development. The investment in telecommunications also contributes to competitiveness, which is essential to wider economic development. The Postal Services investments have improved An Post's capability to provide an efficient and affordable universal service and the computerisation of rural post offices contributes to local development.

1.6.7 Finally, the Monitoring Committee recognised that employment in the overall economy, arising either directly or indirectly from investments arising under the

EIOP, depends critically on the ability of those bodies involved with the implementation of the OP investments :-

- Coping with increasing competition, which will become even more severe in the medium to long term;
- Operating flexibly and imaginatively in existing and new commercial markets;
- Adapting successfully to changing regulatory environments

## **1.7 Equal Opportunities**

1.7.1 The EIOP Monitoring Committee addressed the issue of gender equality in the investments being implemented under the OP on a number of occasions in the recent past. In particular, the paper prepared for the CSF in 1998, reproduced at **Appendix 6**, should be noted.

1.7.2 The Monitoring Committee was aware of the requirements of Article 4.7.4 of the Community Support Framework concerning gender equality, but considered that the issue of participation as understood in the context of gender equality issues had little relevance for the infrastructural type investments to be implemented under the Economic Infrastructure Operational Programme.

1.7.3 At a general level, the EIOP Monitoring Committee considered that there was no discrimination against men or women or any impediments by either sex in respect of any of the operations implemented under the OP. In the context of introducing measures to target a particular inequality problem, it was the Committee's view that the operations being co-financed under the Operational Programme did not lend themselves to be re-orientated for the purpose of targeting a specific group which are considered to be marginalized or to remove a particular form of discrimination or where there is a gender inequality problem. With regard to the introduction of measures which took into account the possible effects of cofinanced measures on the

respective situations of men and women, it was not possible to establish the relative impact of cofinanced investments on either sex.

1.7.4 As regards sectoral development, the EIOP was concerned with once-off infrastructural investments which were designed to enable new or enhanced services to be provided for the postal, energy and telecommunications sectors. The EU investments represented only a small part of the total investment that were implemented by agencies in the postal, energy and telecommunications sectors over the period of the OP. Some of the investments implemented under the EIOP - particularly in telecommunications infrastructure - represented network enhancements intended to benefit the entire population as a whole rather than any particular sex. All goods and services provided by State companies in the postal, energy and telecommunications sectors are accessible on equal terms to all citizens without exemption.

1.7.5 The range of investments implemented under the Operational Programme only had a very marginal and in-direct impact on work-place innovations, which is considered to be the best forum to provide scope to increase equal opportunity involving employee participation, positive flexibility and improvements in the distribution of work and flexible working hours. The EIOP did not embrace any training of workers in relation to any of the sectors covered by the Operational Programme. In overall terms, the Operational Programme had a neutral impact on promoting or enhancing gender equality in terms of access to and participation in the labour market.

## **1.8 Compliance with EU Community Policies**

1.8.1 This Section of the Chapter discusses, in a general way, the issue of compliance with European Community Policies across the wide range of Measures, implementing bodies and final beneficiaries involved in the EIOP. Discussion of compliance with such policies in the context of individual Measures is contained in Chapters 2, 3 and 4.

1.8.2 Ensuring compliance with EU policies and regulations relevant to the Structural Funds was an integral part of the responsibilities of those charged with the implementation of the projects under the individual Measures (viz. the Measure Leaders and the Implementing Bodies). Accordingly, the Lead Department had a critical role in ensuring that Measure Leaders, and the Implementing Bodies reporting to them, were fully aware of the relevant policies and regulations, were aware of their responsibilities in ensuring the application of those policies and regulations, and were discharging those responsibilities.

1.8.3 As part of its work in this respect, the EIOP Secretariat drew up a comprehensive document entitled, *Guide to Monitoring and Control of EU Funding*, which it issued to all Measure Leaders in July 1999. The *Guide* was designed to outline the requirements on financial control and to provide a general description of the operational procedures and the management and control systems in place to ensure the efficient implementation of the operations being co-financed under the EIOP. During the lifetime of the OP, the EIOP Secretariat also made Measure Leaders aware of the various EU regulations governing eligibility of expenditure, selection criteria as defined in the OP, reporting and claiming procedures, audit trail etc. All new and updated regulations were circulated to the EIOP Measure Leaders as they appeared. On a regular basis, the EIOP Secretariat held information sessions and workshops for the EIOP Measure Leaders and their Measure Teams to remind them of their duties and responsibilities in general, and specifically in relation to compliance with EU policies and regulations. Representatives of the Paying Authority attended several of these sessions, and gave presentations and dealt with queries on various issues of particular interest.

1.8.4 As a further initiative in ensuring compliance with EU policies and regulations, in Autumn 2000, each Measure Leader under the EIOP was required to complete Form A of Department of Finance Circular 23/98 insofar as it related to the Measure. In completing that form, each Measure Leader gave unqualified confirmation that the requirements of key EU regulations were being observed by the relevant EIOP Measure Team and by any relevant agencies (Implementing Bodies) reporting to the Measure Leader in relation to that Measure. **Appendix 7** of this report lists the key EU Regulations in respect of which this confirmation was given.

1.8.5 Of course, in addition to having to meet requirements under the EU-determined control framework, projects funded under the EIOP also had to comply with national legislation and have regard to national policies. In this regard, EIOP projects were subject to provisions on a number of issues including, environmental standards, planning requirements, equality legislation, and tendering procedures.

## **1.9 Information and Publicity**

1.9.1 Following the announcement by the European Commission to provide EU assistance towards the EIOP on 29 July 1994, the then Minister for Transport, Energy and Communications issued a press statement welcoming the Commission's approval of the OP. The Commission's announcement received extensive media coverage on national television and in the print media. Copies of the Programme were circulated to the various implementing agencies as well as other interested parties including other Monitoring Committees and Government Departments. Presentations concerning investments under the OP were also made to a number of Regional Authorities.

1.9.2 Over the lifetime of the programme, the Monitoring Committee took a very active interest in ensuring compliance with the EU information and publicity requirements in respect of EU funded projects. All of the agencies involved with the Programme took action to acknowledge EU assistance for the various projects. This involved placing advertisements in the national media, erection of signs and plaques and other media opportunities.

1.9.3 The Department of Transport, Energy and Communications initially, and subsequently the Department of Public Enterprise, availed of every suitable opportunity to acknowledge the assistance of the European Community in press releases, speeches or through other media. The EIOP Monitoring Committee ensured that agencies involved with the implementation of various projects under the OP publicly acknowledged EU grant assistance for the projects. Steps were also taken by the EIOP Secretariat to implement the provisions of European Commission Decision 94/342/EC of 31 May 1994 concerning information about the Structural Funds Assistance including:-

- acknowledgement of EU assistance in brochures for official openings of co-financed projects; and
- the erection of information notices at the sites of projects costing 1 Million euro or more, providing suitable acknowledgement of the Structural Fund assistance

1.9.4 Annual Reports of the EIOP, for the years 1995, 1996, 1997, 1998, 1999 and 2000, contain a dedicated section on publicity and information. In addition, the annual reports of the Department of Public Enterprise in recent years have included references to the EIOP, including expenditure funded under ERDF.

1.9.5 Chapters 2 and 3 outline publicity and information activities at the level of individual Measures under the EIOP.

## **1.10 Summary Data on EIOP**

1.10.1 **Table 1.3** overleaf is the key Expenditure Table for the EIOP, underpinning Annual Expenditure within each Measure for each year from 1994 through to 2001.

1.10.2 **Table 1.4** on page 25, sets out ERDF Expenditure for each Measure in the same period.



**Table 1.3: Measure spend 1994 - 2001**

Measure	Eligible Expenditure MioECU	Eligible Expenditure in IR£	Payments in 1994	Payments in 1995 IR£	Payments in 1996	Payments in 1997	Payments in 1998	Payments in 1999	Payments in 2000	Payments in 2001	Payments Total
			IR £	IR£	IR£	IR£	IR£	IR£	IR£	IR£	IR£
<b>Energy Sub-Programme</b>	<b>212.198610</b>	<b>167,119,986.01</b>	-								
Peat Generation	111.400000	<b>87,734,630.00</b>					6,092,638	39,733,729	37,011,074	6,191,533	<b>89,028,974</b>
Energy Efficiency	56.524900	<b>44,516,976.34</b>	843,369	1,346,276	5,143,630	11,927,559	11,173,863	6,262,058	17,644,383	0	<b>54,341,138</b>
Renewables	29.021300	<b>22,856,131.11</b>	-	-	-	-	-	181,774	5,123,273	32,323,403	<b>37,628,450</b>
Cutaway Bogs	2.800000	<b>2,205,179.20</b>	-	84,999	449,010	530,886	505,161	486,024	182,181	0	<b>2,238,261</b>
Rural Networks	12.452410	<b>9,807,069.83</b>	-	667,440	3,857,015	620,694	2,473,583	1,290,018	870,048	563,300	<b>10,342,098</b>
<b>Communications Sub-programme</b>	<b>171.769124</b>	<b>135,279,178.37</b>									
Telecom	41.792000	<b>32,913,874.68</b>	-	10,898,419	9,040,068	2,769,810	8,122,984	2,789,542	0	0	<b>33,620,823</b>
Postal Services	23.219124	<b>18,286,546.17</b>	2,121,904	696,558	5,109,562	1,638,943	1,888,506	399,285	2,055,990	2,042,553	<b>15,953,301</b>
Broadband	99.758000	<b>78,565,809.51</b>	-	-	-	-	-	13,350,765	23,340,213	7,562,738	<b>44,253,716</b>
E-Commerce	7.000000	<b>5,512,948.00</b>	-	-	-	-	-	1,745,153	2,368,675	0	<b>4,113,828</b>
<b>Technical Assistance Sub-Programme</b>	<b>2.132087</b>	<b>1,679,154.97</b>									
Technical Assistance (General)	1.798187	<b>1,416,187.35</b>	31,041	31,848	112,824	208,343	475,026	112,858	15,419	48,475	<b>1,035,834</b>
I.S.Awareness	0.333900	<b>262,968.00</b>	-	-	-	-	-	173,559	89,441	0	<b>263,000</b>
<b>TOTAL</b>	<b>386.099821</b>	<b>304,078,319.42</b>	<b>2,996,314</b>	<b>13,725,540</b>	<b>23,712,109</b>	<b>17,696,235</b>	<b>30,731,761</b>	<b>66,524,765</b>	<b>88,700,697</b>	<b>48,732,002</b>	<b>292,819,423</b>

**Table 1.4: ERDF Expenditure 1994 - 2001**

Measure	ERDF Expenditure MioEUR	ERDF Expenditure in IR£	Payments in 1994	Payments in 1995 IR£	Payments in 1996	Payments in 1997	Payments in 1998	Payments in 1999	Payments in 2000	Payments in 2001	Payments Total
			IR £	IR£	IR £	IR£	IR£	IR£	IR£	IR£	IR£
<b>Energy Sub-Programme</b>	<b>56.633200</b>	<b>44.602269</b>									
Peat Generation	26.000000	<b>20.476664</b>	0	0	0	0	1,401,307	9,138,758	8,512,546	1,424,053	<b>20,476,664</b>
Energy Efficiency	16.985900	<b>13.377483</b>	446,942	735,237	1,631,780	2,779,925	2,936,595	1,832,691	2,470,679	0	<b>12,833,849</b>
Renewables	6.021300	<b>4.742159</b>	0	0	0	0	0	85,000	550,775	2,302,636	<b>2,938,411</b>
Cutaway Bogs	1.400000	<b>1.102590</b>		42,499	224,505	265,443	252,581	243,012	91,090	0	<b>1,119,130</b>
Rural Networks	6.226000	<b>4.903373</b>		333,720	1,928,508	310,347	1,236,792	645,009	435,024	281,650	<b>5,171,050</b>
<b>Communications Sub-programme</b>	<b>53.057064</b>	<b>41.785833</b>									
Telecom	19.396000	<b>15.275591</b>	0	5,122,257	4,248,832	1,301,811	3,817,802	1,311,085	0	0	<b>15,801,787</b>
Postal Services	7.003064	<b>5.515361</b>	997,295	327,382	2,401,494	770,303	899,364	202,553	966,315	944,440	<b>7,509,146</b>
Broadband	24.158000	<b>19.025970</b>						5,027,420	8,789,086	2,847,856	<b>16,664,362</b>
E-Commerce	2.500000	<b>1.968910</b>	0	0	0	0	0	693,707	922,872	0	<b>1,616,579</b>
<b>Technical Assistance Sub-Programme</b>	<b>1.597987</b>	<b>1.258517</b>									
Technical Assistance (General)	1.347487	<b>1.061232</b>	23,281	23,886	84,618	124,797	356,269	84,643	11,564	36,356	<b>745,414</b>
I.S.Awareness	0.250500	<b>0.197285</b>						130,169	67,081	0	<b>197,250</b>
<b>TOTAL</b>	<b>111.288251</b>	<b>87.646620</b>	<b>1,467,518</b>	<b>6,584,981</b>	<b>10,519,737</b>	<b>5,552,626</b>	<b>10,900,710</b>	<b>19,394,047</b>	<b>22,817,032</b>	<b>7,836,991</b>	<b>85,073,642</b>

# **Chapter 2**

## **EIOP Sub- Programme : Energy**

## 2.1 Peat Generation Measure

### 2.1.1 Introduction:

2.1.1.1 Bord na Mona submitted the proposal to the Department of Transport, Energy and Communications (subsequently the Department of Public Enterprise) for a new 120 mega Watt peat-fired station in 1993. The objective was to maximize the use of available peat reserves in the East Midlands area. The proposal was subsequently included in the Energy Sub Programme of the EIOP, under the Community Support Framework for Ireland 1994 – 1999 and EU financial support of £21 million (€26m) was sought. The EU Commission sought a full socio-economic cost benefit analysis before deciding to commit Structural Fund aid to the project. A Memorandum of Understanding (**Appendix 8**) between the Minister for Public Enterprise and the EU Commissioner for Regional Policy, signed in 1995, set out the basis for the provision of EU Structural Fund assistance (€26m) to the Peat Generation Measure.

2.1.1.2 Edenderry Power Limited (EPL), a wholly owned subsidiary of the Fortum Group, the international energy group based in Finland, was awarded the contract in early 1998 to build, own and operate a new 120MW peat-fired electricity generating Powerstation at Ballykilleen near Edenderry in Co. Offaly. EPL awarded the Turnkey contract to construct the plant to Fortum Engineering Ltd (Formally known as IVO Power Engineering Ltd) - also a wholly owned subsidiary of the Fortum Group. The Turnkey contractor was issued with a notice to proceed on the 5<sup>th</sup> January 1999. The Contractor commenced work on site on the 26<sup>th</sup> January 1999 and the Edenderry Power Plant was declared commercially operational on the 22<sup>nd</sup> December 2000.

2.1.1.3 The EIOP negotiated with the EU included the provision for a grant from the EU Structural Funds of up to 23% of eligible expenditure for the Edenderry power project up to a maximum grant of €26 million. This financial support is the subject of a grant agreement dated 19 March 1998, between the Minister for Public Enterprise and the developer EPL. Measure spending is outlined in the Table 2.1 below.

**Table 2.1: Peat Generation**

Year	1998	1999	2000	2001	Total
Spend IR£	6,092,638	39,733,729	37,011,074	6,191,533	89,028,974
Grant IR£	1,401,307	9,138,758	8,512,546	1,424,053	20,476,664
Spend €	7,736,054	50,451,429	46,994,370	7,861,625	113,043,478
Grant €	1,779,293	11,603,829	10,808,704	1,808,174	26,000,000

### **2.1.2 Information and Publicity**

2.1.2.1 During visits by external auditors, acting on behalf of the Department of Public Enterprise, to Edenderry Power Limited in London, Fortum Engineering Limited in Helsinki and Edenderry Power Station in Co. Offaly copies of all relevant publicity material were obtained. The billboard was inspected by the audit and the audit confirmed that the section of the billboard used to indicate EU involvement took up at least 25% of the total billboard area. The wording in relation to EU involvement was as follows:

*‘THIS PROJECT RECEIVED PARTIAL FINANCIAL ASSISTANCE FROM THE EUROPEAN UNION’<sup>2</sup>*

2.1.2.2 A summary of the various other publicity measures indicating that the Peat Generation Measure is part-financed by the EU is set-out in Table 2.2

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Note: The specific recommended wording per Decision 94/342/EC is ‘THIS PROJECT IS BEING PART-FINANCED BY THE EUROPEAN COMMUNITY’.

**Table 2.2 Summary of Publicity for Peat Generation Measure**

No	Name of Publication	Date	Title of article	EU part-Finance Mentioned
1	Department of Public Enterprise Press Release	01/04/98	£100 midlands electricity station on schedule	Yes
2	Irish Independent (National Newspaper)	02/04/98	IVO looking to other Irish projects after europeat	Yes
3	The Examiner (National Newspaper)	02/04/98	Powerstation receives EU aid package	Yes
4	Presentation (by Paavo Javanainen & Michael Hoven)	Mar 2000	Presentation to IEI (Institute of Engineers of Ireland)	Yes
5	Offaly Topic (Local newspaper)	06/07/00	Enright questions sale of power station	Yes
6	Sunday Business Post (National Newspaper)	03/09/00	No buyer yet for new peat fired power station	Yes
7	Opening Speech	27/11/00	Minister for Public Enterprise – Plant opening speech	Yes
8	Design, Supply & Build magazine (Meridian Media)	March '01	Edenderry Power: making the link	Yes

### 2.1.3 Declaration of Observance of Relevant Community Policies:

2.1.3.1 *Competition rules:* Community competition rules have been observed for this Measure. There was an open competition conducted by independent consultants<sup>3</sup> to select the preferred bidder to build, own and operate the station.

2.1.3.2 *Public procurement:* As part of the external audit on this project, the procurement procedures followed were reviewed with nine contracts chosen for detailed testing. These nine contracts constituted almost 65% of the Turnkey contract cost. For each contract chosen audit obtained and inspected all relevant documentation including the originating tender, responses and evaluation documentation. Audit established that procurement procedures within the Turnkey contracts were satisfactory. Helm Corporation, the external auditors, received the contract.

<sup>3</sup> Stone & Webster Management Consultants Limited was the lead member of a consortium which advised on designing a framework for the competition to build, own and operate the new peat fired power station. The other members were, 2) Matheson, Ormsby & Prentice, 3) NCB corporate Finance, 4) Natwest Markets and lastly 5) Allen & Overy.

2.1.3.3 *Equal Employment Opportunities:* The developers of the Peat Generation Measure adopt a policy of equal employment opportunity for all.

2.1.3.4 *Environmental (EIS):* As part of the necessary planning and environmental requirements, both at Irish and EU levels, the developer submitted an Environmental Impact Statement to the Environmental Protection Agency in May 1999. Edenderry Power Ltd received the Integrated Pollution Control (IPC) Licence in July 1999 in accordance with Section 85(2) of the Environmental Protection Agency Act 1992. A copy of the IPC Licence is held on file in the Department of Public Enterprise.

## **2.1.4 Impacts on Employment and on the Environment**

2.1.4.1 *Construction:* During the construction of the Power Plant, excluding the construction of the integrated Bord na Móna works, the employment was as follows:

1999	Average number employed	116
	Peak number employed	248
2000	Average number employed	263
	Peak number employed	421

2.1.4.2 *Operations:* The total number of full time employed operators, managers and support staff is 50. Bord na Móna have 250 people employed full time and 150 seasonal staff employed at Derrygreenagh associated with the supply of peat to the new power station at Ballykillen. Development work at Bord na Móna's bogs is now practically completed and the total man-years on the project was 549, a significant and positive increase on the projected 420 contained in the Memorandum of Understanding.

2.1.4.3 The Peat consumption per year is 1 million tonnes per annum and the energy output per year 118 Mega Watts. This output is not expected to change in the coming years. The overall contribution to the national energy output is 2.75%. The present lifespan of the plant based on Public Service Obligation is 15 years.

2.1.4.4 *Environment*: The Edenderry Plant is designed to achieve very strict environmental limits, with SO<sub>x</sub> and NO<sub>x</sub> emissions levels roughly 50% lower than the current EU standard emission levels for new large-scale combustion plant.<sup>4</sup> As well as low emissions, the state-of-the-art fluidised bed technology will ensure that the conversion from peat to electricity will be highly efficient with over 38% thermal efficiency<sup>5</sup>, which is higher than most coal fired plants.

### 2.1.5 Files

2.1.5.1 The Key reference files at the Department of Public Enterprise for the Peat Generation Measure are set out in Table 2.3:-

**Table 2.3 : Files for Peat Generation Project**

8/45/1	CSF Structural Funds 1994-1999: Closure of Operational Programmes and Data on Expenditure and Commitments.
8/47/1	EIOP Quarterly Expenditure returns - New Peat Station 1999 to date
8/47/2	New Peat Station- General Managers Quarterly Progress Report.
8/49/1	Briefing for EIOP Monitoring Committee.
8/50/1	EIOP: Annual Reports by Ireland for Submission to EU Commission. Peat Generation Measure, 1998 to 2000.
8/52/1	EU Commission Regulation concerning irregularities in context of Structure Funds. EIOP Returns - Peat Generation Measure. 1999 to date.
8/63/1	Structural Funds: EU Regulations/Directives and Decisions regarding Financial Control, Management, Publicity, Procurement etc.
8/63/2	EU Datasheets/Factsheets on Financial Control and Eligible Expenditure under the Structural Funds.
8/63/3	Planning Unit draft 'Guide to monitoring and control of EU fundings'; Planning Unit 'Audit Trail' document and Dept. of Finance Circular 23/98
8/63/4	EU Commission Audit of EIOP and in particular Peat Generation Measure; 29 May to 1 June 2000
8/64/2	New Peat Station: Cost Benefit Analysis for EU Commission 1994 - National Economic Research Associates (NERA).

<sup>4</sup> See Air Pollution Act 1987 and Council Directive 94/66/EC.

<sup>5</sup> Based on the latest technology available from Finland, the EPL station has a net conversion efficiency of 38%, compared to the average of 25% in the existing peat stations.



8/64/3	New Peat Station: Memo of Understanding dated 12 April 1995 between Minister and EU Commission on Structural Funding conditions.
8/64/6	New Peat Station - Agreement on EU Grant towards Station
8/64/8	New Peat Station: question of Appointment of Consultant to Monitor Expenditure on, and EU Support for Project; 1998 to date.
8/64/9	New Peat Station. Claims for drawdown of EU Grant expenditure.
8/64/11	New Peat Station Progress of Project - Report for Ministers information (weekly & monthly) from Feb 1998 to date.
8/64/13	Launch of Edenderry Power Station by Minister-27/11/00.
17/23	New Peat Station Competition and matters arising, finalising award of contract on 1/4/98.
17/31	New Peat Station - Planning Application and Objections (including IPC licence) 1998.

## **Section 2.2 : Energy Efficiency Measure**

### **2.2.1 Background to the Measure**

2.2.1.1 The Irish Energy Centre (IEC) was established in 1994 for the purpose of delivering the Energy Efficiency Measure of the EIOP (1994-1999). It was also assigned an information and support function with regard to Renewable Energy. As the Centre was in its infancy in 1994 strengthening of the institutional infrastructure took longer than anticipated which resulted in some delay in the launch of programmes. In addition the lead-in time between the launch of funding programmes and the approval of grant support and the implementation of projects with resultant payments, was underestimated in the original profiles, which further compounded the delay in expenditure against originally profiled amounts.

2.2.1.2 The measures funded through the EIOP were of two kinds – direct and indirect. The direct measures were co-funded by industry and offered financial support for energy audits and energy efficient investments. Indirect measures had a wider application and covered information, advice and support (including the establishment of the IEC itself). During the lifetime of the EIOP the Energy Efficiency Measure covered a range of activities, which included:

- Energy Audits
- Energy Efficiency Investment Support Scheme (including Special call for Large Scale Combined Heat and Power)
- Self Audit Scheme for Industry
- Technical Advice
- Backup, promotion and information measures
- Grant Support for Combined Heat and Power projects (new scheme arising from reallocation of aid within the measure following on from the Mid-Term Review and administered by the Department of Public Enterprise)
- Energy Awareness Week

- Boiler Awards
- Other initiatives to support and promote energy efficiency.

2.2.1.3 EU aid for the Energy Efficiency Measure was initially set at €19.7m.

The table below summarises the financial details of EU commitment over the lifetime of the EIOP.

**Table 2.4: EU Financial Details**

<b>Allocation</b> (Million euros)	<b>Revised Allocation</b> (Million euros)	<b>Reason</b>
19.7	18.49	Following Mid-Term review €2.54 million savings identified were re-allocated to new energy projects (this provision included €1.33 million aid for AER IV Competition) (1998).
	18.5535	Further allocation of €0.0635 million to AER IV (1998).
	17.4107	Allocation of further savings identified (€ 1.1428 million) to Broadband Technology / Information Society Measure (1999).
<b>Final Allocation</b>	16.9859	€0.4248 million surrendered from 5 CHP projects unable to meet end 1999 deadline for having commitments in place (2000).

2.2.1.4 Actual expenditure to the end of the programme under the Measure is as follows:

**Table 2.5: Expenditure Under Measure by Year**

<b>Year</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>Total</b>
<b>Euro</b>	1,042,968	1,689,249	6,305,145	15,963,691	14,481,532	7,951,173	22,403,745	69,837,503
<b>IR£</b>	843,369	1,346,276	5,143,630	11,927,559	11,173,863	6,262,058	17,644,383	54,341,138
<b>Euro Rate</b>	<b>0.808624</b>	<b>0.796967</b>	<b>0.815783</b>	<b>0.747168</b>	<b>0.771594</b>	<b>0.787564</b>	<b>0.787564</b>	

*Note: these figures include full private investment on grant schemes; all rates given are at correct euro rate for differing years.*

A breakdown of expenditure between the individual components of the Measure is set out in Table 2.6 below: -

**Table 2.6: Breakdown of Expenditure**

Spending under the Energy Efficiency Measure	Private Sector	EU ERDF	Exchequer	Total Spend	Total Spend
	€	€	€	€	IR£
Audit Grants*	1,738,242	1,091,637		2,829,879	2,202,671
Investment Grants	40,439,131	9,068,226		49,507,357	38,387,206
Advice / Backup/ Building		5,397,941	4,455,018	9,852,959	7,732,307
CHP Scheme (DPE)	6,452,450	572,059		7,024,508	5,532,250
Self Audit	66,529	336,313	219,959*	622,801	486,704
<b>Total</b>	<b>48,696,351</b>	<b>16,466,176</b>	<b>4,674,977</b>	<b>69,837,503</b>	<b>54,341,138</b>

\* Self Audit Exchequer co-funding was met by time in lieu

## 2.2.2 Energy Audit Grant Scheme (EAGS)

2.2.2.1 The Energy Audit Grant Scheme was launched in September 1994. It replaced the Fuel Efficiency Grant Scheme administered by the Department of Transport, Energy and Communications (subsequently the Department of Public Enterprise). A total of €2,829,879 was spent on this scheme. This scheme provided grants of 40% (up to a maximum of €6,349 [£5,000]) to energy users in the industrial, commercial and institutional sectors towards the cost of hiring consultants to conduct energy audits and to advise on the steps to be taken to improve and enhance energy efficiency. Details of all grant payments made under the Measure are outlined in **Appendix 9**.

2.2.2.2 Following the mid-term review of the Energy Efficiency Measure, (see Appendix 4 to this Final Report) it was recommended that the scheme be discontinued after June 1997. The EIOP Monitoring Committee agreed with this recommendation but designated 31 October 1997 as the cut-off date. At closure of this scheme a total of 453 audits (includes fuel efficiency grants paid by Department) were completed with the involvement of over 40 consultants. This activity leveraged €1.74 million private expenditure and identified an estimated €3.9 million national annual realisable savings as a result.

### **2.2.3 Self-Audit Scheme**

2.2.3.1 Following the discontinuance of the Energy Audit Scheme, savings of €0.67 million were deployed to augment an existing advisory / information corporate programme - the Self Audit Scheme. This Programme required participating companies to set annual targets in respect of energy savings, to audit and report against those targets for publication in an annual report on the scheme.

2.2.3.2 The Self Audit Scheme membership rose to 74 in 2000 with a combined annual energy spend of €235million (IR£185m). A total of €622,801 was spent on this scheme. Activities of this voluntary agreement, additional to the ongoing informal networking, included workshops and site visits focussing on technological solutions such as Energy Management Systems, Efficient Motors, Process Change, and on behavioural solutions such as Staff Awareness and Energy Monitoring and Targeting. Furthermore the subject of the link between energy, the environment and large industry was covered at a specific workshop. The 1999-2000 Annual Report of the Scheme recorded annual energy savings of 296.05 Giga watt hours (GWh), which equates to 124,341 tonnes CO<sub>2</sub>.

A list of members and annual reports of the scheme are available on the Irish Energy website [www.irish-energy.ie](http://www.irish-energy.ie).

## **2.2.4 Energy Efficiency Investment Support Scheme (EEISS)**

2.2.4.1 The Energy Efficiency Investment Support Scheme was launched in December 1994. The scheme provided grant assistance for investment in energy efficient technologies for the industrial, commercial and institutional sectors. A total of €49,507,357 was spent on this scheme. Grants of up to 40% of the cost of the project subject to a maximum of €126,974 (£100,000) were made available. The scheme formally closed for applications in September 1997. In June 1996 an Addendum to the original Terms of Reference provided for an increase of the grant to €317,435 (£250,000) subject to a maximum of 20% of the project cost. The payment structure of the scheme was in five stages as follows:

1. Detailed Engineering Study
2. Procurement and Installation
3. As Built Report
4. Interim Monitoring Report
5. Final Project Report

2.2.4.2 The scheme was revised for administrative and operational efficiency in March 1998 with the combination of the final two payments. Over the life of the programme a total of 217 projects were funded under the scheme providing over €8.8 million in EU funding grant support which leveraged over €39 million in Private Investment in a range of energy efficient technologies.

## **2.2.5 Grants for CHP**

2.2.5.1 The Irish Energy Centre launched a special scheme in October 1998 to support the introduction of Large Scale Combined Heat & Power Plants. This scheme allowed payment in three stages as follows:

- |  |     |
|--|-----|
| 1. Detailed Engineering Study            | 5%  |
| 2. Procurement and Installation          | 75% |
| 3. Connection, Running and Commissioning | 20% |

2.2.5.2 A total of €7,024,508 was spent on this scheme. The scheme offered grant assistance of up to 20% of the cost of implementing the CHP Plant subject to a maximum grant of €634,869 (£500,000). Under this mechanism 16 MW of CHP was installed and commissioned in early 2000.

### **2.2.6 CHP scheme organised by the Department of Public Enterprise:**

2.2.6.1 In addition to the Combined Heat and Power scheme run by the IEC, a second scheme was operated by the Department of Public Enterprise (organised under the AERIV competitive tendering scheme) for large-scale projects, which included the right to sell electricity to the grid.

2.2.6.2 Full information on this scheme is outlined in the EIOP Annual Report, 1999. In summary, the Department launched the Fourth Alternative Energy Requirement competition (AER IV) in 1997 to secure 25MW of newly installed additional electricity generating capacity from high efficiency CHP systems and up to 10MW of additional electricity generation capacity from existing similar systems.

2.2.6.3 The EIOP Monitoring Committee approved an allocation of €1.33m towards the capital costs of projects successful in the competition. Grant-aid was made available at the rate of €53,200 per installed megawatt. An additional €63,500 was allocated to the scheme in 1998.

2.2.6.4 The results of the competition were announced in August, 1998. Contracts for 19 CHP electricity generating stations were awarded, representing 42 MW of new capacity and the upgrading of 7.6 MW of existing capacity. The commissioning deadline for all projects was 31 December 1999.

2.2.6.5 During the course of the competition, a number of developers decided not to proceed with their projects. As a consequence 13 projects, representing 31.2MW, withdrew from the scheme. At the end of 1999, a total of three new plants and two existing plants had been commissioned representing a total installed capacity of 18.353MW.

2.2.6.6 A total of €561,100.40 was disbursed in two grant payments during the course of 2000. The table overleaf summarises the financial aspects of the EIOP funding

<b>Allocation (€ million)</b>	<b>Decommitted/ Reallocated (€ million)</b>	<b>Expenditure 1999 (€ million)</b>	<b>Expenditure 2000 (€ million)</b>	<b>Total Expenditure (€ million)</b>
1.33 (Sept 1997)	0.45 (1999) (transferred to other IEC energy efficiency measures)	0.010959	0.5611	0.572059
0.08 (1998)	0.2148 (1999)	-	-	-
1.41 (total)	0.6648 (total)	-	-	-
0.7452 (final allocation)	-	-	-	-

## **2.2.7 Other Initiatives**

2.2.7.1 In addition to the grant schemes a number of other elements of the Irish Energy Centre (IEC) Programme were funded under the EIOP. These included the IEC building as well as Advice and Backup. A total of €9,852,959 was spent on these schemes.

2.2.7.2 *IEC Building*: Part of the ERDF funds, (€0.286 million), were earmarked for the building of a new Headquarters for the IEC to embrace the latest in energy efficient technologies and architecture. Therefore as well as serving as a functional Headquarters for the IEC it was also to be a flagship energy conservation and energy efficient demonstration building. Construction of the energy efficient building commenced in February 1995 and it was officially opened on 22 July 1996. Architects and builders were encouraged to visit the new building and to include the innovative design features in their building plans. The highly acclaimed “Our House” TV Programme camera team visited the Centre and transmitted footage of the design approach. Articles in trade journals have featured the building.



2.2.7.3: *Advice Back-Up*: An integral and crucial component of the Energy Efficiency Measure was the provision of advice, support and promotional campaigns on energy efficiency. This incorporated a wide range of integrated activities including: -

- Establishment of reference sites which are used as models for promoting various types of energy efficient technologies.
- Establishment of Regional Energy Offices in Sligo and Cork.
- Establishment of a Renewable Energy Information Centre in Cork. This is a national service of the Irish Energy Centre, established to promote the use of renewable energy resources and provide independent advice and information on financial, social and technical information relating to renewable energy development.
- Multi-sector technical advice measures.
- Development of good practice guides and training courses. The Irish Energy Centre organises training courses to educate energy users in the commercial sector in the area of energy and boiler house management.
- Promotion of National Boilers' Initiative. This comprises a set of integrated measures designed to support, encourage and educate boiler users and service providers. The initiative aimed to raise operational standards, increase energy efficiency and improve competitiveness.
- Educational programmes, seminars and development of information packs (including the promotion of EU energy programmes in Ireland).
- Sponsorship of selected events, i.e. management and co-ordination of the various activities of Energy Awareness Week, an annual event which is co-ordinated by the Irish Energy Centre. It remains the single most important platform for promoting energy efficiency in Ireland. The primary target audience are household consumers. The campaign informs them of how much energy is used on a domestic basis and the potential for savings there; where this

energy comes from, and the longer term implications of current consumption trends.

- Management and co-ordination of the various activities of Energy Awareness Week.
- A range of North/South initiatives.

### **2.2.8: Re-Allocated Funding**

2.2.8.1 Following the mid-term review of the Measure, the External Evaluator recommended that the extent of expenditure on advice, information and support elements of the Measure should not exceed 50% of the Measure funding. The Monitoring Committee agreed that ERDF provision for these aspects of the Measure should be reduced by €2.54 million. This funding was re-allocated to other energy related projects.

### **2.2.9: Compliance with Commission Decision on Information / Publicity with respect to the Operational Programme**

2.2.9.1: The Irish Energy Centre adhered to the guidelines laid down by the EU in respect of publicity and information actions with respect to the EIOP. This includes written / verbal acknowledgement of EU funding support and the inclusion, where possible, of the EU logo in:

- All printed promotional material and publications
- Stationery
- Building signage, both during and after construction
- Press releases and press statements
- Advertisements

### **2.2.10 Impact on Employment**

2.2.10.1 The creation of employment was one of the stated primary objectives of economic policy in Ireland and the EU as a whole. The Measures receiving ERDF

assistance under the EIOP 1994-1999 were selected on the basis of their contribution towards the achievement of the aims and objectives of the Community Support Framework generally, which included the provision of adequate infrastructure to help offset Ireland's geographic and structural disadvantages, thereby ensuring an adequate base for employment and wealth generating activity.

2.2.10.2 In this context, the investment initiatives provided under the EIOP, had a positive stimulative role to play. Through the implementation of the Energy Efficiency Measure improved employment opportunities arose through direct and indirect avenues.

### **2.2.11 Impact on the Environment**

2.2.11.1 By encouraging energy savings the activities assisted under the EIOP Energy Efficiency Measure contributed positively to the protection of the environment.

### **2.2.12 Promotion of Equal Opportunity**

2.2.12.1 The Energy Efficiency Measure had little or no impact on the promotion of equal opportunity; however the Irish Energy Centre effected all of its full-time requirements through Forfas, which is itself an equal opportunities employer. In its engagement of further contract staff and consultants for all activities the Centre is also committed to equal opportunities.

### **2.2.13 Compliance with Public Procurement**

2.2.13.1 The administration of the Measure was fully compliant with regard to Public Procurement. All the Procurement and Publicity Requirements stipulated by the EU were complied with in the implementation of each of the projects.

## 2.2.14 NCC Energy Performance Indicators

2.2.14.1 The Annual Competitiveness Report of the National Competitiveness Council (NCC) for 2001 has produced comparative *Energy* data that place Ireland's costs in an international context for a range of aspects of energy. The data, largely for 2000, as reproduced in the NCC's Report for the year 2001, is summarised in the table below.

**Table 2.8: Summary of Comparative Energy Costs**

	Indicator	Industrial Electricity Prices 24 GWh per annum – VAT excluded (euro)	Industrial Electricity Prices 10 GWh per annum – VAT excluded (euro)	Industrial Electricity Prices 1.25 GWh per annum – VAT excluded (euro)	Key Indicator: Gas prices – industrial rate excl. VAT (4186 G/J 200days)	Key Indicator: Gas prices – industrial rate excl. VAT (41860 G/J 250days/4000 hours)	Key indicator: Automotive diesel oil prices for commercial use (US\$/toe)	Heavy fuel oil prices for industry use (US\$ per toe)
Ireland	Value	5.31	6.17	8.06	5.66	4.7	703.5	271.3
	Rank	8	9	11	2	2	13	14
	Year	Jan 01	Jan 01	Jan 01	Jan 01	Jan 01	Q3 2000	Q3 2000

## 2.3 Renewable Energy Measure

### 2.3.1 Overview of Measure

2.3.1.1 The EU aid provision and original spending profile for the Renewable Energy Measure was intended to support the first Alternative Energy Requirement Scheme (AER 1) which involved the procurement of an additional 75 Megawatts (MW) of renewable/alternative based electricity generating plant. In the event the grant-aid was not required for this competition. Subsequently, the EIOP Monitoring Committee agreed at the meeting held in September 1995, that the aid should be deployed towards the development of other projects in the Renewable Energy area (specifically the AER II competition (waste to energy electricity generating plant), and AER III competition (wind, hydro, biomass and wave electricity generating plants). A Renewable Energy Feasibility Study Grant Scheme (REFSGS) administered by the Irish Energy Centre and the Renewable Energy Information Office was also funded. However, the withdrawal of EIOP funding for the proposed waste to energy and wave to energy projects, and the lower than anticipated funding required for the AER III projects, impacted significantly on the spend profile for the measure.

2.3.1.2 A total of €3,730,987 was disbursed in grant aid payments under the Measure. The contribution from private sources amounted to an additional €44,047,289. The grant-aid was allocated to 11 renewable energy projects awarded contracts under the AER III competition and 25 studies supported under the Renewable Energy Feasibility Study Grant Scheme. These projects and studies are discussed in more detail below.

2.3.1.3 Details of the AER III projects and REFSGS studies supported, including details of grant-aid payments made, are outlined in the table at **Appendix 11 and 12**.

## 2.3.2 Financial Details - EU Allocation

2.3.2.1 The EU aid for the Renewable Energy Measure was initially set at €18.6m. A further €670,000 was allocated to the Measure following the mid-term review (1997). The allocation was reduced to €8.701m following the withdrawal of funding for the AER II and AERIII<sup>6</sup> schemes in 1998 (see below). Further funds were re-allocated from the Measure as a result of the Monitoring Committee Meeting in October, 1999. The final revised allocation for the Measure was €6.0216m, this included a re-allocation of funding from the Broadband Measure in December, 1999. Table 2. 9 below summarises the position.

**Table 2.9 : Renewable Energy Measure – EU Funds Allocation**

<b>Year</b>	<b><u>Description</u></b>	<b>Allocation (€ million)</b>	<b>De- commitments (€ million)</b>	<b><u>Totals</u> (€ million)</b>
<b>1994</b>	Renewable Energy Measure	<b>18.6</b>		
<b>1997</b>	Mid-Term Review	<b>+ 0.670</b>		<b>19.27</b>
<b>1998</b>	AER II waste to energy scheme		<b>- 9.3</b>	<b>9.97</b>
<b>1998</b>	AER III Wave Energy Station		<b>- 1.2697</b>	<b>8.701</b>
<b>1999</b>	AER III Projects not proceeding		<b>- 0.7814</b>	<b>7.9196</b>
<b>1999</b>	AER III projects to be funded by the Exchequer		<b>- 2.9124</b>	<b>5.0072</b>
<b>1999</b>			<b>- 0.0529</b>	<b>4.9543</b>
<b>1999</b>	From Broadband Measure	<b>+ 1.068</b>		<b>6.0216</b>
	<b>Final Allocation*</b>	<b>€6.0213m</b>		

\*Final figure adjusted in this table by .00005m due to rounding error

<sup>6</sup> AER II was a waste-to-energy proposal. The AERIII withdrawal related to a wave energy proposal only.

### 2.3.3 Financial Details – Expenditure

2.3.3.1 Total EU expenditure amounted to €3,730,987. Details of expenditure are outlined in Table 2.10

**Table 2.10 : Renewable Energy Measure –Expenditure details**

Year	Structural Fund	Priority	Measure	Scheme	Expenditure (€)	Total EU Expenditure (€)
1999	ERDF	EIOP	Renewable Energy	REFSGS	107,927.74	<b>107,928</b>
2000	ERDF	EIOP	Renewable Energy	AER III	691,925.15	<b>699,314</b>
				REFSGS	7,388.61	
2001	ERDF	EIOP	Renewable Energy	AER III	2,800,449.02	<b>2,800,449</b>
2002	ERDF	EIOP	Renewable Energy	AER III	123,296.15	<b>123,296</b>
					<b>Total</b>	<b>3,730,987</b>

23.3.2 Total expenditure in the Measure amounted to €47,778,276 (IR£ 37,628,450)

**Table 2.11: Total Expenditure Details**

Annual Expenditure Details					
Sub Programme: 1. Energy			Measure: 1.3 Renewables		
Year		EU	Private	Total	
		IR£	IR£	IR£	
1994	Outturn	0	0	0	
1995	Outturn	0	0	0	
1996	Outturn	0	0	0	
1997	Outturn	0	0	0	
1998	Outturn	0	0	0	
1999	Outturn	85,000	96,774	181,774	
2000	Outturn	550,754	4,572,519	5,123,273	
2001	Outturn	2,302,637	30,020,766	32,323,403	
	<b>Totals</b>	<b>2,938,391</b>	<b>34,690,059</b>	<b>37,628,450</b>	

### **2.3.4 Overview of AER Programme (AER II & AER III competitions)**

2.3.4.1 The rationale for the promotion of renewable energy technologies in the EU has focused around their potential contribution to energy security, the positive effects on the environment, regional development and sustainable employment. The European Commission's White Paper for a Community strategy and action plan for renewable energy sources, published in November 1997, set out a strategy to double the share of renewable energies in gross domestic energy consumption in the European Union by 2010. However, these technologies cannot yet compete with conventional technologies in electricity production. In recognition of this fact, Member States have initiated their own programmes which offer assistance, in the form of a long term contracts and/or financial assistance (usually a combination of grant-aid and price support) to develop these resources.

2.3.4.2 In Ireland, the Alternative Energy Requirement (AER) Programme has been used as the principal market mechanism to support the increased use of renewable and alternative energy sources in electricity generation. The Department of Public Enterprise (now the Department of Communications, Marine and Natural Resources) administers the Programme. In regard to AER II and AER III, these competitions were conducted with independent advice from the U.K. consultancy firm, ETSU. Bids were evaluated using technical, commercial and economic criteria and were then ranked in terms of the tendered selling price per unit of electricity (kW/h). The effect of this was to exert downward pressure on prices. The assistance offered to winning bids is in the form of a contract with the Electricity Supply Board (ESB) which allows developers to sell the output of the winning facilities to the ESB for up to fifteen years under Power Purchase Agreements (PPAs). The original ERDF allocation for the Measure was intended to fund the first AER Competition (AER I). However, as funding was not required for the scheme, the EIOP Monitoring Committee decided in September 1995 to approve the offer of funding for subsequent AER competitions i.e. AER II & AER III.



### **2.3.5 AER II scheme (Waste-to-Energy station).**

2.3.5.1 A competition to secure one biomass/waste fuelled electricity generating plant of between 10 and 30 MW of installed generation capacity was announced in December 1995. An application by Foster Wheeler Power Systems Inc. and ESB Power Generation to build, own and operate a 30 Megawatt plant at a site in Dublin was the winner of the competition. The ERDF grant aid for the winning project was €9.3 million and was subject to approval by the European Commission. Total investment in the project was estimated to be in excess of €25 million.

2.3.5.2 Under Article 5 of ERDF Regulation 4254/88 there is a requirement that projects of this size, which are being co-funded under an Operational Programme, must have a socio-economic cost benefit valuation undertaken. The analysis was undertaken by Environmental Resource Management Ltd. and the outcome was positive. The consultants' report was submitted to the European Commission (DG XVI) in April 1997. The Commission retained an independent expert to review the cost benefit analysis.

2.3.5.3 The Commission indicated that it was not prepared to approve ERDF aid for the project on the grounds that:-

- the potential revenue from the project was sufficiently attractive for the station to proceed without grant aid (the Commission wished to avoid potential deadweight arising on the project) and
- the construction of the station would be at variance with the indicative time horizon for thermal conversion of waste i.e. the year 2004 outlined in the Dublin Waste Management Strategy Report.

2.3.5.4 In view of the Commission's position, the EIOP Monitoring Committee decided not to approve grant assistance for the project. The associated ERDF grant-aid (€9.3 million) was subsequently reallocated by the Monitoring Committee to the Information Society - Broadband Technology Measure.

### **2.3.6 AER III Scheme (Wave Energy Station)**

2.3.6.1 In the context of the offer of EU grant assistance for the development of a wave-to-energy project, the EIOP Monitoring Committee decided in March 1998, that a technical report prepared by ETSU, the company which evaluated tender proposals for the wave energy station, should be examined by the External Evaluator for the Operational Programme. A paper subsequently prepared by the External Evaluator was circulated to the EIOP Monitoring Committee for consideration. The Evaluator's opinion was that:-

- wave to energy technology was not yet proven;
- the wave energy project put forward was at the Research and Development (R&D) stage, and
- R&D projects were not within the scope of the EIOP.

2.3.6.2 The EIOP Monitoring Committee decided not to offer the ERDF grant aid of €1.269m for the project following an evaluation of the wave energy station proposals by the External Evaluator to the Operational Programme.

### **2.3.7 AER III scheme (Wind, biomass and hydro technologies)**

2.3.7.1 The Third Alternative Energy Requirement competition was launched in March 1997. The competition was conducted under contract by the U.K. consultancy firm ETSU, following a tender process organised by the Department. ETSU evaluated the bids received using technical, commercial and economic criteria and were then ranked in terms of bid price per kilowatt hour (kW/h). The results of the competition were announced in April 1998.

2.3.7.2 Three technologies were supported in the competition: biomass/waste, hydroelectricity and windpower. The original target was to provide 100 Megawatts of new electricity generation capacity. In order to allow for possible fall-out, contracts

for 158.75MW were provided for. The targets in each class and authorised contract volumes are set out below:-

**Table 2.12: Target Capacity**

<b>Category</b>	<b>Target</b>	<b>Contracted</b>
Large wind (over 5MW)	65 MW	100.82 MW
Small wind (under 5MW)	25 MW	36.51 MW
Biomass/Waste	7 MW	17 MW
Small scale hydro schemes	3 MW	4.42 MW

2.3.7.3 In total, 30 projects were selected to receive the offer of Power Purchase Agreements from the ESB for a period of 15 years. In addition, 18 of these projects were offered ERDF grant-aid at the rate of €80,000 per installed megawatt. The remaining 12 projects were placed on a reserve list for the receipt of ERDF funding if projects above them in their respective categories failed to proceed. Projects under 5 MW were also entitled to receive a grid connection grant of €11,670 per installed Megawatt.

2.3.7.4 The commissioning deadline for all projects was 31 December 1999. It was recognised at the inception of AER III that the end 1999 deadline for the completion of projects would be challenging. This was as a consequence of the time which elapsed in complying with the EU procurement rules for the competition, and the lengthy planning process applying to project developers (all but two of the projects required planning permission for site development when the results of the competition were announced in April 1998).

2.3.7.5 As a result of the delays in the planning process the Department decided, following the receipt of legal advice, to extend the commissioning deadline for the draw-down of the ERDF grant-aid by developers, subject to the receipt of documentary evidence that binding commitments for each project were in place. In this way, the Department had endeavoured to ensure that projects still in the planning

process would be in a position to proceed to construction once the necessary planning consents had been received.

2.3.7.6 However, the delays in the planning process continued during 2000 and a number of projects failed to receive planning permission (either from the Local Authority or on appeal from An Bord Pleanála). In addition, several projects failed to proceed for other reasons (mainly site access problems).

2.3.7.7 In the event, a total of 11 projects were constructed under AER III including 6 windfarms, 4 small scale hydro schemes and one landfill gas project. 42.11 Megawatts in electricity generating capacity was added to the national grid as a result. All 11 projects have been awarded 15 year contracts to supply electricity to ESB and it is estimated that enough *green* electricity will be generated on an annual basis to meet the needs of some 28,000 homes with a corresponding reduction in greenhouse gas emissions (mainly carbon dioxide) amounting to approximately 220,000 tonnes per annum.

2.3.7.8 These projects were developed in the main by small and medium size enterprises and represented a total investment of €47,532,100 (£37,434,570) in indigenous renewable energy resources which have contributed to reducing dependency on energy imports, increased security of electricity supplies, provided sustainable employment and helped to strengthen the electricity grid in peripheral areas. It is estimated that up to 230 jobs in total were provided during the construction of these projects, primarily in rural areas where 10 of the 11 projects are located. In addition, a further 26 long-term jobs have been created through the on-going operational and maintenance (O&M) aspects of these projects. The total EU grant-aid disbursed under the scheme amounted to €3,615,670.55 (£2,847,571.96).

### 2.3.8 Renewable Energy Feasibility Study Grant Scheme

2.3.8.1 Following the mid-term review of the EIOP, a sum of €200,000 was allocated under the Renewable Energy Measure to support a *Renewable Energy Feasibility Study Grant Scheme* administered by the Irish Energy Centre, in conjunction with the Renewable Energy Information Office. The scheme was launched in 1998.

2.3.8.2 Grant-aid of up to 50 per cent, subject to a maximum grant of €7,618.43 (IR£6,000), was made available towards the costs of conducting feasibility studies to determine the viability of developing renewable energy sites and to strengthen applications for market access and planning permission.

2.3.8.3 Applications were approved in 1998 and the scheme was formally closed at the end of that year. Twenty five projects were offered support, representing total ERDF grant-aid of €115,316.48. A total of €107,928.14 was drawn down in 1999; the balance of €7,388.34 was drawn down in 2000. The table below summarises the position.

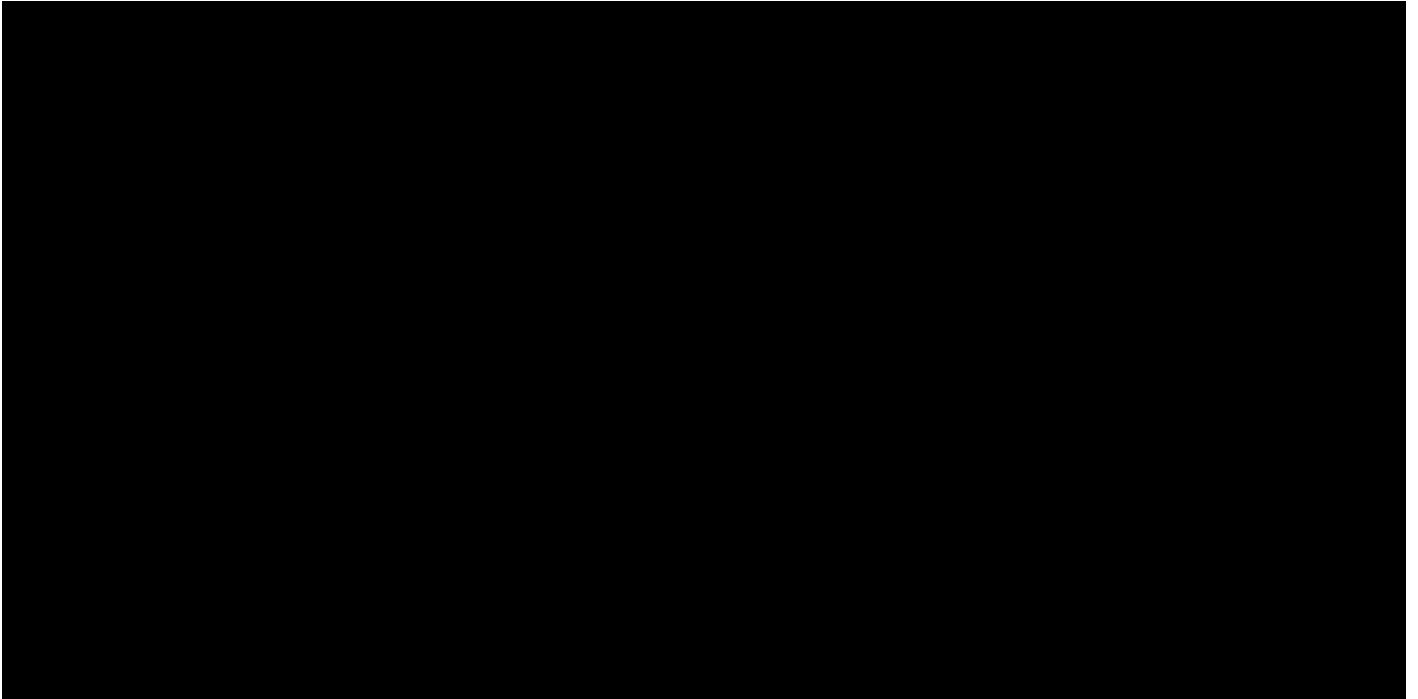
**Table 2.13 : Renewable Energy Feasibility Study Grant Scheme**

<b>Allocation (€ million)</b>	<b>Decommitted October 1999 (€ million)</b>	<b>No. of projects</b>	<b>Expenditure in 1999 (€ million)</b>	<b>Expenditure in 2000 (€ million)</b>	<b>Balance (€ million)</b>
0.2	0.052	25	0.107928	0.007388	0.032684

### 2.3.9 Performance Indicators

2.3.9.1 The AER Programme promotes the increased use of renewable and alternative energy sources in the generation of electricity. The incentive to prospective developers is access to a guaranteed demand contract with the ESB obliging the latter to purchase all the output from selected generating stations for up to fifteen years at guaranteed prices. Emphasis is placed on a competitive tendering process in order to deliver renewable based electricity at lowest cost.

2.3.9.2 Successful applicants in the Third AER competition (AER III) were entitled to apply for ERDF grant-aid once projects were constructed and connected to the national grid. As the EIOP programme progressed, a range of wind energy, landfill gas and hydro-electric power projects were completed and applications for funding were subsequently processed. The following table highlights the contribution of renewable energy capacity to the national grid on a project by project basis.



2.3.9.3 As a result of AER III, 42.11 Megawatts in electricity generating capacity was added to the national grid. It is estimated that this will provide enough green electricity to meet the needs of some 28,000 homes with a corresponding reduction in greenhouse gas emissions (mainly carbon dioxide) amounting to approximately 220,000 tonnes per annum.

### **2.3.10 Underspend under the Operational Programme**

2.3.10.1 The EU aid provision and original spending profile for the Renewable Energy Measure was intended to support the first Alternative Energy Requirement Scheme (AER 1) which involved the procurement of an additional 75 Megawatts of renewable/alternative based electricity generating plant. In the event the grant-aid was not required for this competition. Subsequently, the EIOP Monitoring Committee

agreed that the aid should be deployed towards the development of other projects in the Renewable Energy area (specifically the AER II [waste to energy] and AER III [wind, hydro, biomass and wave] competitions). However, the withdrawal of EIOP funding for the proposed waste to energy and wave to energy projects and the lower than anticipated funding required for the AER III competition impacted significantly on the spend profile for the Measure.

### **2.3.11 Information and Publicity**

2.3.11.1 All of the projects supported under the AER III scheme received both public and media attention especially at local level. The wind energy projects in particular attracted much interest locally. The distinctive profile of the wind turbines provided additional interest in viewing the projects at first hand. As a result the signage denoting the financial support received from the European Regional Development Fund received significant exposure at all of the sites. A number of the projects have also featured on company web-sites, including references to the ERDF grant-aid provided. In order to maximise the exposure that these projects can garner from being posted on the web, links to these sites have been provided from the renewable energy section of the internet site of the Department of Public Enterprise.

### **2.3.12 Observance of Community policies**

2.3.12.1 The AER competitions were administered in accordance with EC Public procurement rules and State aids guidelines. The launch of the individual schemes (AER I - AER III) was notified in the Official Journal of the European Communities in accordance with the provisions of Directive 93/38/EEC<sup>7</sup>.

2.3.12.2 The offer of contracts under the AER Programme is subject to the receipt of planning permission for the site and/or electricity grid connection, as appropriate. As

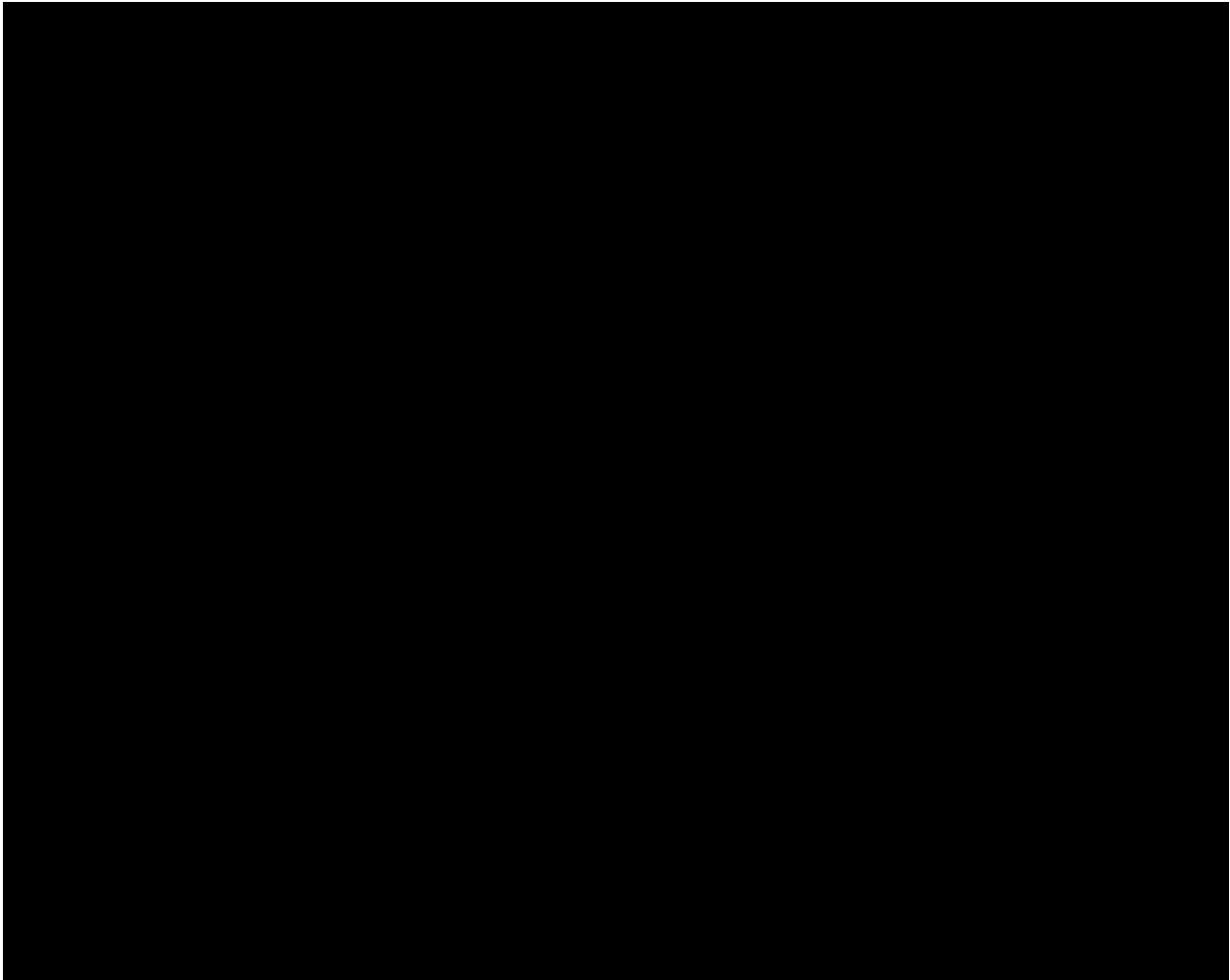
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<sup>7</sup> Directive 93/38/EEC of 14 June 1993 coordinating the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors

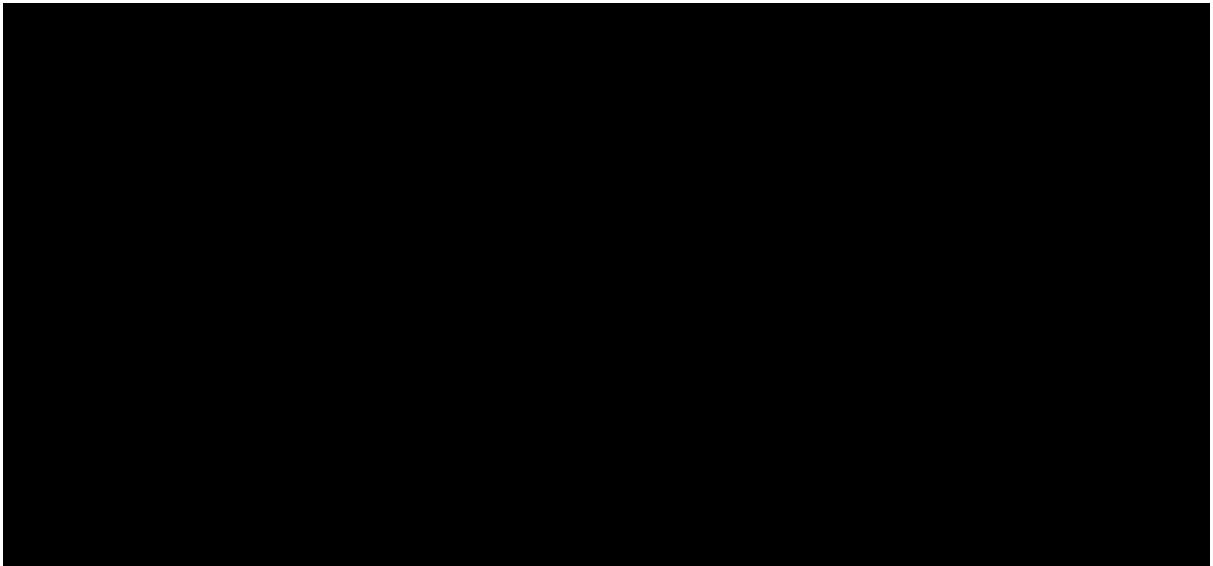
part of the planning process, an Environmental Impact Assessment study may also have been required by the Local Planning Authority in accordance with the provisions of the European Communities (Environmental Impact Assessment Amendment) Regulations, 1999. In the case of the 11 renewable energy projects supported in AER III, Environmental Impact Studies were provided to the Local Planning Authorities(s) for all but one project. The exception was the Landfill Gas Project where planning permission had already been obtained for works undertaken at the landfill site and a separate planning consent was not required. Evidence of planning consents and EIS reports were furnished to the Department by all AER III applicants in support of the ERDF grant-aid applications.

### **2.3.13: List of Files**

2.3.13.1 The files retained at the Department of Public Enterprise for the Renewable Energy Measure are set out in Table 2.12:-







## 2.4 Cut-away Peatlands Measure

### 2.4.1 Background to the Measure

2.4.1.1 The Cutaway Peatlands Measure project comprised two main elements:-

- **Information Studies** required to supplement the existing level of knowledge regarding the rehabilitation of cutaway peatlands to form wetlands; and
- **On site Developments** that lead to the creation of some 3,000 acres (1,200 hectares) of wetlands, including 65 acres of angling lakes in several different catchments.

2.4.1.2 The Operational Programme provided for European Regional Development Fund (ERDF) assistance towards the rehabilitation of industrially cutaway peatland for wetland, wilderness and wildlife purposes. The total investment amounted to €2.8 million of which 50% of the investment was funded from the ERDF. The Cutaway Peatlands Measure was completed in June 2000. Measure spending is outlined in the Table 2.13 below.

**Table 2.15 Cutaway Peatlands**

<b>Year</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>Total</b>
<b>Spend IR£</b>	84,999	449,010	530,886	505,161	486,024	182,181	2,238,261
<b>Grant IR£</b>	42,499	224,505	265,443	252,581	243,012	91,090	1,119,130
<b>Spend €</b>	106,653	550,404	710,531	654,698	617,123	231,322	2,870,731
<b>Grant €</b>	53,327	275,202	355,266	327,349	308,561	115,660	1,421,002

**Table 2.16 Expenditure Under Cutaway Bog Measure to 30 June 2000**

	<b>Original Total Cost IRP</b>	<b>Plan Extent of Aid at 50% of Cost IRP</b>	<b>Actual Spend to 30 June 00 IRP</b>
<b>Development of Wetlands</b>			
Noggus	143,100	71,550	147,260
Turruan	119,800	59,900	114,840
Blackwater	189,400	94,700	101,353
Fennamores	92,100	46,050	229,666
Boora*	100,000	50,000	692,675
Derrygreenagh / Derryounce	185,000	92,500	154,678
Moundillon*	205,000	102,500	0
Oweninny / Blanket*	0	0	43,247
Littleton*	0	0	125,002
<b>Sub total</b>	<b>1,034,400</b>	<b>517,200</b>	<b>1,608,721</b>
<b>Technical Studies</b>			
Hydrological Impact	121,000	60,500	80,429
GIS Mapping*	106,000	53,000	0
Sustainability of Wetlands	70,675	35,338	70,675
Ecological Diversity	71,500	35,750	71,500
Regeneration Zoological Impact	71,500	35,750	30,000
Blanket Peat Regeneration	97,075	48,538	97,075
Partridge Habitat Protection	125,400	62,700	125,400
Eco - Tourism Study	50,000	25,000	32,700
Central Fisheries Board	0	0	10,886
<b>Sub total</b>	<b>713,150</b>	<b>356,576</b>	<b>518,665</b>
<b>Admin + Tech Support</b>	<b>450,000</b>	<b>225,000</b>	<b>110,876</b>
<b>Overall Total</b>	<b>2,197,550</b>	<b>1,098,776</b>	<b>2,238,262</b>

\* No expenditures under Moundillon Wetlands and G.I.S. mapping. A 75% reduction over the original Admin & Tech Support budget. Monies reallocated to expanded work at Boora and new developments in Oweninny and Littleton.

2.4.1.3 *Individual Projects*: The following points should be noted in relation to the individual projects funded under the Cutaway Peatlands Measure:-

*Noggus / Cloghan Lake and Wetlands:*

This is now a quality “put and take” lake surrounded by 60 hectares of wetland / wildlife habitat. It is now managed by the local Cloghan Community and is proving a very attractive amenity in the area. It was opened by Mr. Liam Hyland, M.E.P., in August 1999.

*Turraun:*

Initially 100 hectares, the wetlands now extend to 190 hectares of wetland, inclusive of a 4 hectares angling lake. A series of public pathways and bird hides are in place.

*Blackwater:*

The wetlands at Blackwater Works are now part of the tourist route taken by the Clonmacnoise and West Offaly Railway tour which carries some 50,000 people annually. Bird hides, nature trails and total peat profile are features on this trip.

*Fennamores:*

Consists of two quality angling lakes stocked with coarse fish (bream, tench, carp, rudd) with twelve fishing stands used regularly by visiting English and German anglers.

*Boora:*

What initially consisted of only a small number of widely dispersed wetlands is now series of wetlands within reasonable flight distance of each other. These are proving ideal habitats for wild birds as any disturbance in one area means that they can readily fly and seek refuge in the neighbouring wetlands. The wetlands continue to be used by up to 350 Whooper Swans each winter, together with several thousand migrating duck. The combined wetlands of the Boora complex extend to some 550 hectares.

*Derrycastle:*

Consists of 3 hectares angling lake surrounded by 40 hectares of wetland. Access roads, car parking and walking routes have been provided and it now provides an excellent amenity for the people of Portarlington.

*Oweninny / Blanket Bog:*

The research findings from the PhD study on Blanket Bogs (full title: See Table 2) was carried forward to demonstration reclamation work at Oweninny. This consisted mainly of creating conditions which resulted in saturated ground conditions which in turn facilitated natural colonisation of the spent Blanket peat cutaways.

*Littleton:*

Consists of a 4 hectares angling lake surrounded by 25 hectares of wetlands. It has car parking and fishing stand facilities together with a developed walkway. It was officially opened by Mr. Brian Crowley M.E.P. in August 2000 and handed over to the local Slieveardagh Community.

## **2.4.2 Outputs and Impacts Achieved**

2.4.2.1 The Cutaway Peatlands measure does not lend itself to normal indicator measurements, as the primary objective is the creation of wetlands, which will maximise the diversity of ecological habitat throughout the midlands of Ireland.

2.4.2.2 The creation of some 3000 acres (1,200 hectares) increased areas of wetlands has led to a very substantial rise in the number of both resident and migrating bird species using the wetlands. The success of the wetlands can be gauged by the fact that the majority of resident bird species are breeding and rearing young successfully. The usage of the wetlands by migrating species is increasing each year, with substantial flocks of Whooper Swans, Widgeon and Teal arriving each autumn. Some 350 Whooper Swans, for example, use the wetlands as a resting place after their migration from Iceland.

2.4.2.3 *Usage of Angling lakes:* In the early months of 1999 the lakes at Finnamores were stocked with coarse fish, carp, tench, rudd and bream. During the fishing months of the year the occupancy of angling lake platforms in the 65 acres of angling lakes

created under the Measure is very high - particularly by English angling tourists. It is now estimated that up to 400 anglers per month use the area in the period March to September. The combination of local and visitor anglers ensures that all fishing stands are occupied each weekend. Loch an Dochais which was developed for disabled anglers was used to stage the All-Ireland Disabled Angling Championship. It is also used by local groups to teach fishing skills to juvenile anglers, and a number of juvenile fishing competitions have been held in conjunction with local festivals.

2.4.2.4 *Turraun Wetlands*: This is a vast wild area with restored habitats uniquely high in value. The shallow flooded area spans over 60 hectares and 110 bird species are recorded there to date. There is a secluded bird-hide 300 metres from the car park. There are many kilometres of walking paths through vast areas where natural recolonisation is occurring on drylands. Over 270 vascular plant species are recorded here ranging from trees to reeds to heathers and wild grasses, and the area has attractive displays of wild orchids during the month of July.

2.4.2.5 *Technical Studies*: Five Technical Studies on the ecological factors associated with cutaway peatland rehabilitation in Ireland were accepted and published in the Proceedings of the International Peat Society Conference, Quebec, Canada in August, 2000 – which not alone ensured that cutaway peatland research work in Ireland was brought to an international audience but also indicated that such research is on a par with other worldwide research on rehabilitation of peatlands. These technical studies provide an excellent reference base on the ecological process that takes place on newly established wetlands on cutaway bogs. Table 2.17 provides descriptions of the technical studies:-

**Table 2.17: Description of Technical Studies**

<b>Name:</b>	<b>Student:</b>	<b>Title:</b>
Ms. Una Leader	Research Student National University of Ireland-University College Galway.	A hydrological study of Garryduff Bog (East Co. Galway near Shannonbridge, Co. Offaly)
Ms. Aine O'Connor	PhD Student Trinity College Dublin.	Ecology of Artificially Created wetlands on cutaway bog with a view to designing management strategies.
Mr. Robert Rowland	PhD Student National University of Ireland-University College Dublin	Investigation of the Ecologies of Irish Midlands Cutaway Peat lands.
Ms. Catherine A. Farrell	PhD Student National University of Ireland-University College Dublin	Rehabilitation of Atlantic bog industrial cutaway at Bellacorrick, North West Mayo.
Mr. Edward C O'Gorman	PhD Student Trinity College Dublin.	Home range and habitat use by the endangered grey partridge in the Irish Midlands.

### 2.4.3 Information and Publicity

2.4.3.1 Material in relation to media and press coverage indicating EU involvement on the Cutaway Peatlands Measure is held on file within the Peat Division, Department of Public Enterprise. The material includes press cuttings and ministerial speeches/launches.

### 2.4.4 Declaration of Observance of Relevant Community Policies

- This project has no impact on community competition rules.
- Bord na Móna is an equal opportunities employer.
- As part of an external audit of this measure no irregularities have been detected and public procurement procedures have been followed.

2.4.4.1 *Files:* The Key reference files at the Department of Public Enterprise for the Cutaway Peatlands Measure are as follows:-

**Table 2.18: List of Files**

8/45/2	CSF Structural Funds 1994-99: Closure of Operational Programmes and Data on Expenditure and Commitments (Cutaway Bog Measure)
8/47	EIOP Quarterly Expenditure Returns and Progress Reports- Monitoring of Expenditure: Cutaway Bogs Measure 1995 to date
8/49	EIOP Monitoring Committee Meetings-Agenda, Brief and Minutes. Cutaway Peatland Measure. Vols 1-3. 1995 to date.
8/50	EIOP: Annual Reports by Ireland for Submission to EU Commission. Cutaway Peatland 1996 to date.
8/52	EU Commission Regulation concerning irregularities in Context of Structure Funds- EIOP Returns- Cutaway Bogs Measure Vols. 1 and 2. 1990 to date.
8/53	EIOP: Drawdown of Expenditure by Bord na Mona and Audit of Expenditure: Cutaway Peatland Measure. Vols 1 to 3. 1995 to date.
8/53/1	EU Structural Funds: Financial Control Procedures in Bord na Mona
8/53/2	EIOP: Cutaway Peatlands Measure- Audit by PriceWaterHouseCooper of Grant Claims made by Bord na Mona. 1998/99.
8/53/3	EIOP Cutaway Peatlands Measure: Inspection of Bord na Mona Records, Newbridge, 1/12/99 (including scientific studies)
8/53/4	EIOP Cutaway Peatlands Measure: Audit Report by Departments Internal Audit Unit in 1999.
8/63/1	Structural Funds: EU Regulations/Directives and Decisions regarding Financial Control, Management, Publicity, Procurement etc.
8/63/2	EU Datasheets/Factsheets on Financial Control and Eligible Expenditure under the Structural Funds.



## **2.5 Rural Energy Networks Measure**

### **2.5.1 Introduction**

2.5.1.1 The Rural Networks Measure of the EIOP was designed to assist the problems created by peripherality and population settlement patterns for energy supply. The implementing body is the Department of Public Enterprise (now the Department of Communications, Marine and Natural Resources) and the final recipient/beneficiary is the Electricity Supply Board. Given the nature of the projects, the rationale for the projects relates to the socio-economic justification rather than the strict economic return criteria. The rural electrification projects however support areas of dispersed demographic settlements. While the benefits are related to socio-economic criteria they also support tourism and some manufacturing activity. The investments will enhance the quality and capacity of supply thereby eliminating constraints imposed by the existing supply system on socio-economic development. The investments will complement other EU investments particularly in the development of tourism. The funding for the rural energy network represents a small part of the overall programme.

### **2.5.2 Projects Under the Measure**

2.5.2.1 There are six projects in the Rural Networks Measure of EIOP.

1. The Aran Islands (Inis Mor, Inis Meain, and Inis Oirr) / Cape Clear
2. Inisbofin
3. Clare Island
4. Screebe / Carraroe
5. Leitrim Network Renewal Program
6. Monaghan Network Renewal Program

### **2.5.3 Investments Under the Measure**

2.5.3.1 The Rural Networks Measure involved a total investment of €13.13 million (IR£10.34M.) over the life of the programme.

2.5.3.2 ESB was allocated EU funding of € 6,226,000 (IR£4,903,373) in the EIOP programme for (1) the provision of submarine cable supply to the following islands,

the Aran Islands (Inis Mor, Inis Meain, Inis Oirr), Cape Clear, Clare Island and Inisbofin Island and (2) the upgrading of Rural Networks in Counties Leitrim and Monaghan.

2.5.3.4 Funding for the Rural Networks Measure changed throughout the years of the EIOP programme. The table below shows the changes in funding during the lifetime of the programme.

**Table 2.19: Total funding**

Year	1995	1996	1997	1998	1999	2000	2001	Total
IR£ Spend	667,440	3,857,015	620,694	2,473,583	1,290,018	870,048	563,300	10,342,098
€	847,474	4,897,399	788,119	3,140,803	1,637,985	1,104,733	715,243	13,131,756
EU Spend	333,720	1,928,508	310,347	1,236,792	645,009	435,024	281,650	5,171,049
€	423,737	2,448,700	394,059	1,570,402	819,107	552,367	357,622	6,565,878

**Table 2.20: Rural Networks Funding**

Year	Funding IR£	Funding Euro	Project Allocated (Euro)
1994	2,441,448.40	3,100,000	Aran Islands/Cape Clear
1995			
1996			
1997	425,284.56	540,000	Clare Id (270,000)/Inisbofin (270,000)
1997	663,916.45	843,000	Clare Id (421,500)/Inisbofin (421,500)
1998	249,657.79	317,000	Screebe (136,000)/Clare Id (181,000)
1998	613,512.36	779,000	Leitrim
1999	509,553.91	647,000	Monaghan
2000			
2001			
Total	4,903,373.47	6,226,000	

## 2.5.4 Island Submarine Cable Electricity Supply

2.5.4.1 Cape Clear, Aran Islands, Clare Island and Inisbofin were connected to the National Grid during the lifetime of the programme.

2.5.4.2 Each project involved the laying of a submarine cable link (see lengths in table below) between islands and the mainland. Work was also required on the Networks on the islands and the mainland to provide adequate voltage. These projects were delivered on time and within budget.

**Table 2.21: Cost per Project**

Island	Length of Cable	Final Cost	Exchange Rte	€ millions	Year
Cape Clear	5.2km	£882,230	0.815783	1,081,451	1996
Aran Islands	40Km	£4,200,437	0.747168	5,621,810	1997
Clare Islands	10Km	£1,162,410	0.771594	1,506,504	1998
Inisbofin	12Km	£1,295,313	0.771594	1,678,747	1998

2.5.4.3 A total of €3.1 million (approx IR£2.5m at that time, €3,174,345) was approved for the Aran Islands and Cape Clear. The final grant aid received was IR£ 2,393,063 (€3,038,563.22).

2.5.4.4 An additional €136,000 (IR£107,109) was provided for reinforcement work at Screebe to ensure the reliability of supply to the Aran Islands.

2.5.4.5 A total of €1.561 million (IR£1.23m, €1,561,777) was approved for Clare Island and Inisbofin and the final funding rate was 50%.

## 2.5.5 Performance Indicators

2.5.5.1 The performance indicators for the islands were to increase voltage variation capability and the supply capacity. The previous figures are given below with the projected performance improvement resulting from the installation of the submarine cable supply to the islands. The performance improvements were achieved.

**Table 2.22: Performance Indicators**

<b>Island</b>	<b>Before</b>	<b>After (% improvement)</b>
<b>Inis Mor</b>		
Capacity	0.9MVA*	4.0 MVA (344%)
Voltage Variation Capability	2.0MVA	22.0 MVA (1000%)
<b>Cape Clear</b>		
Capacity	0.2MVA	3.3MVA (1550%)
Voltage Variation Capability	1.2 MVA	4.3MVA (258%)
<b>Inis Meain</b>		
Capacity	0.2MVA	0.6MVA (200%)
Voltage Variation Capability	1.5MVA	19MVA (1166%)
<b>Inis Oirr</b>		
Capacity	0.25MVA	0.8MVA (220%)
Voltage Variation Capability	1.8MVA	17MVA (844%)
<b>Clare Island</b>		
Capacity	0.15MVA	0.6MVA (300%)
Voltage Variation Capability	1.1MVA	3.0 MVA (173%)
<b>Inisbofin</b>		
Capacity	0.2MVA	0.6MVA (200%)
Voltage Variation Capability	1.2MVA	3.0MVA (150%)

\*MVA = Million Volt Amps

## 2.5.6 Objectives

2.5.6.1 The objective of the island cable supplies from the National Grid was to replace the noisy and unreliable old diesel generators on the islands which restricted supply to light domestic loads only. The supply was prone to voltage fluctuations, which meant use of computers, agricultural, and industrial tools was restricted. The investments will have positive socio economic benefits for the islands. The improved capacity and quality of electricity supplies will remove the existing constraint in terms of electricity supply and allow the islands to develop their tourist potential.

## **2.5.7 Rural Networks Upgrading**

2.5.7.1 Rural electrification investments funded under EIOP are only a very small percentage of ESB's rural capital Programme. Counties Leitrim and Monaghan were approved for funding as these are areas in which Irish demographic and settlement characteristics impose the most significant cost on energy supply infrastructure. The justification relates to socio-economic criteria rather than direct economic returns.

2.5.7.2 The final overall cost of Leitrim was IR£1,448,592 (€1,839,332.42).

2.5.7.3 The cost of Monaghan at closure was IR£1,160,607 (€1,473,666.90). This project was budgeted at IR£ 1,020,000 (€1,295,132.80) and is IR£140,607 (€178,534.06) over budget. Additional Funding is being sought for this project at the closure of the programme. Expenditure on the Monaghan Project in 2000 amounted to IR£597,307 (€758,423.44). Expenditure on the Monaghan Project in 2001 amounted to IR£563,300 (€715,243.46). The initial cost estimate was based on standard cost / replacement rates. The excess expenditure is as a result of the extent of the refurbishment being greater than anticipated. Completion of the project was delayed due to access restrictions caused by the foot and mouth outbreak.

2.5.7.4 Funding of €779,000 (IR£613,512) was approved for Leitrim and € 647,566 (IR£510,000) was approved for Monaghan to co-finance the upgrading of the rural networks. The work involved the replacement of poles, wires and transformers on the medium and low voltage networks and was carried out between 1999 and 2001.

## **2.5.8 Performance Indicators**

2.5.8.1 The performance indicators for the foregoing projects were similar with the completion of the work having been achieved.

2.5.8.2 The capacity of the medium voltage networks was doubled from 2MVA to 4MVA.

2.5.8.3 The voltage of the networks has been doubled from 10,000 volts to 20,000 volts.

2.5.8.4 The low voltage network was upgraded to supply 120KVA short circuit capacity at the customers' meter. Up until now 45% of customers were supplied below this short circuit level.

### **2.5.9 Outcomes and Impacts**

2.5.9.1 The EIOP projects under the Rural Networks Measure have had a positive socio – economic effect due to the benefits of an enhanced electricity supply. Both capacity and quality of supply were enhanced. Restrictions on voltage sensitive equipment such as computers, agricultural and light industrial tools were removed. This has benefited local industry and tourism in particular. The benefits were particularly noticeable on the island projects, where, even use of domestic electrical appliances was previously restricted. Air and noise pollution from diesel generators was eliminated, with the provision of electricity from submarine cable link between the islands and the mainland.

2.5.9.2 The networks (Monaghan and Leitrim) identified for funding were in areas of the country, which are underdeveloped and would benefit from the upgrade on their electricity supply and remove this constraint on their socio-economic development.

### **2.5.10 Publicity**

2.5.10.1 Publicity signs were erected on all rural networks project sites in accordance with EU Directive 94/342/EC. In addition extensive press publicity was carried out by the ESB highlighting EU assistance. Media interest in the island projects was strong both at national and at regional level. The island projects featured in the EU Commission publication “ A European Success Story – EU Regional Policy in Ireland”.

## **2.5.11 Competition Policies**

2.5.11.1 Where relevant, Community policies including competition, public procurement, equal opportunities and environmental policies were observed by the ESB. The ESB is governed by the Utilities Directive on Public Procurement, and tenders for cable and cable laying were advertised in the EU Journal. ESB is an equal opportunities employer. All planning and environmental requirements were complied with by obtaining foreshore licences from the Department of Marine and Natural Resources (now the Department of Communications, Marine and Natural Resources) for cable laying.

# **Chapter 3**

## **EIOP Sub- Programme**

### **: Communications**



## 3.1 Telecommunications Measure

### 3.1.1 Introduction

3.1.1.1 As part of the EIOP, investment by Telecom Eireann in telecommunications over the period 1995-1999 was assisted by funding of over €19 million. Measure spending is outlined in the Table 3.1 below.

3.1.1.2 In the ten years prior to 1995, Telecom Eireann had invested €2.16 billion (£1.7 billion) in infrastructure which ensured that the company kept up to date with growth in line connections. The funding under EIOP was provided to assist Telecom Eireann in meeting the on-going investment required for future demand for telephone service and to cater for the demand for new and more advanced services.

**Table 3.1: Measure spending - Telecommunications**

Year	1995	1996	1997	1998	1999	TOTAL
Spend IR£	10,898,419	9,040,068	2,769,810	8,122,984	2,789,542	<b>33,620,823</b>
Grant IR£	5,122,257	4,248,832	1,301,811	3,817,802	1,311,085	<b>15,801,787</b>
Spend €	13,838,138	11,478,519	3,516,933	10,314,062	3,541,988	<b>42,689,640</b>
Grant €	6,503,925	5,394,904	1,652,959	4,847,609	1,664,735	<b>20,064,132</b>

### 3.1.2 Objectives

3.1.2.1 The investment in telecommunications was designed to help achieve Telecom Eireann's objective of having in place a high quality mainly digital network with advanced signaling and service capability by the end of 1999.

3.1.2.2 The investment was designed to: -

- Increase customer connections;
- Increase traffic levels on the trunk network;
- Replace analogue technology with digital technology;
- Enhance digital exchanges with new software for new services such as ISDN;
- Enhance transmission networks by the provision of SDH technology;
- Provide Network Management Systems

3.1.2.3 The telecommunications measure involved a wide range of specific projects which can be grouped into two areas as follows: -

- Network enhancement which included analogue exchange replacement, Euro ISDN and the upgrading to the C7 signalling system;
- Network Technology Development which included Coaxial Cable Replacement and developments in SDH, ATM and National Management Systems.

3.1.2.4 Table 3.2 overleaf outlines the total spending by project in the period 1995-1999 and the funding provided under EIOP.

**Table 3.2: Project spending – Telecommunications**

	1995	1996	1997	1998	1999	TOTAL	TOTAL Eligible Expenditure	Aid rate @ 47%
	IEP	IEP	IEP	IEP	IEP	IEP	IEP	IEP
Exchange Digitalisation	6,006,071	3,998,542				10,004,613	10,004,613	4,702,168
C7 Signalling	996,483	-2,229		2,344,758	423,908	3,762,920	3,762,920	1,569,334
Euro ISDN	2,245,036	754,964				3,000,000	3,000,000	1,410,000
SDH	1,350,829	237,171				1,588,000	1,588,000	746,360
ATM			826,156			826,156	826,156	388,293
Coax	300,000	6,925	1,943,654	2,280,837	1,311,297	5,842,713	5,842,713	2,746,075
NMS		4,044,695		3,497,389	1,054,337	8,596,421	8,596,421	3,712,769
<b>Total</b>	<b>10,898,41</b>	<b>9,040,068</b>	<b>2,769,810</b>	<b>8,122,984</b>	<b>2,789,542</b>	<b>33,620,823</b>	<b>33,620,823</b>	<b>15,275,000</b>

### 3.1.3 Projects

3.1.3.1 This Measure involved a number of different projects detailed as follows:

***(a) Exchange Digitalisation:***

Investment under this project involved replacing cross-bar exchanges with digital exchanges. At the end of 1994 there were 390,000 analogue lines in the network and under the investment plans at that time all these lines would not have been replaced until 2005. The grant aid ensured the accelerated replacement of these analogue lines by the end of 1999 and Telecom Eireann met its objective of a fully digital network by the end of the programme. The benefits of accelerated replacement included enhanced quality of service, providing the infrastructure for ISDN and Intelligent Network, allowing for rationalisation of exchanges and availability of supplementary services.

***(b) C7 Signalling:***

C7 is a signalling system between the exchanges to support basic call control, ISDN services, PSTN and ISDN supplementary services, intelligent network services and circuit control. C7 signalling replaced the national R2 signalling to facilitate the rollout of ISDN and Intelligent Network services. Telecom Eireann first introduced C7 signalling during 1993 onto main exchanges and the funding under EIOP provided for the acceleration of the provision of C7 signalling down to primary level (local) exchange.

***(c) ISDN:***

By upgrading an ordinary telephone line to ISDN the customer has the possibility on a dial-up basis of transferring files, images, text and data at speeds many times faster than the traditional networks. Telecom Eireann launched the ISDN in 1994 as an overlay network based on two exchanges in Dublin. The EIOP grant aid allowed for the rollout to the local exchange network and the integration of the ISDN into the PSTN.

***(d) Coaxial Cable Replacement:***

In 1995, the National Trunk Network still contained some coaxial cable routes that were over 20 years old. These routes had a high incidence of faults, high maintenance costs, capacity bottlenecks and an increasing unavailability of spares. It was not

possible to upgrade the line systems in these routes to higher bit rates used in SDH networks. Under the EIOP grant aid programme all the coaxial cable routes were replaced with digital technology and new fibre optic routes were installed for completion of planned SDH rings. The investment in coaxial cable replacement was run in tandem with the rollout of the SDH Network

***(e) Synchronous Digital Hierarchy (SDH):***

SDH technology provides a more reliable high-speed transmission highway, facilitates cross-border interconnect upgrades and supports the introduction of network management systems. The SDH ring linking the main population centres was completed with the assistance of EIOP grant aid and Telecom Eireann developed further rings to ensure fast transmission of large volumes of traffic with diversity of routing.

***(f) Asynchronous Transfer Mode (ATM):***

Telecom Eireann commitment to the development of broadband services included the use of ATM broadband technology. As a member of the European ATM Pilot trial, the EIOP funding assisted in the development work and in the development of other services.

***(g) National Management System:***

Telecommunications networks are increasingly vulnerable to congestion and overload. With the assistance of EIOP grant aid, Telecom Eireann provided network management systems in order to monitor the operation and performance of the network and to initiate corrective actions to optimise network configuration and traffic flows. The equipment for the National Management System was put in place in 1998.

### **3.1.4 Performance Indicators**

3.1.4.1 Specific performance targets for the telecommunications sector were agreed for the CSF including:

- The complete digitalisation of exchanges by 1999;
- Improved telephone penetration rate from 75% to 82% by 1999;
- Improved fault clearance rate;

- Reduced call failure rates

3.1.4.2 The EIOP Monitoring Committee agreed more ambitious and demanding indicators for the Telecommunications measure, particularly in respect of fault clearance and reduced failure rates. The baseline outturn for 1999 and revised indicators for the Telecommunications Measure are set out in the Table 3.3 below. It will be noted that there was some deterioration in the call failure rates on the local and STD networks in 1999. The variation arose from a new statistical sampling methodology introduced by Telecom Eireann in 1999 to measure call failure rates.

3.1.4.3 The Annual Competitiveness Report of the National Competitiveness Council (NCC) for 2001 has produced comparative *Telecommunications* data that place Ireland's costs in an international context for a range of aspects of Telecommunications. The data for 2000, as reproduced in the National Competitiveness Council's Report for the year 2001, is summarised in the table below.

**Table 3.3: Performance Indicators for Telecommunications**

	Indicator	Key Indicator 2Mbits leased lines national circuits – connection (euros)	Fixed-to-Fixed interconnection cost (national) costs per minute	Key indicator: Cost of internet use (30 minutes, peak rate, US\$)	Cost of internet use (30 mins off- peak rate, US\$)	Key indicator: Composite Business basket cost of calls (national and international)	Key indicator: OECD national (GSM) mobile basket)
Ireland	Value	3174	1.54	0.406	0.202	938.8	1681
	Rank	8	2	9	7	15	26
	Year	2000	2000	Nov 00	Nov 00	May 01	May 01

3.4.1.4 Table 3.4 offers an overview of key indicators from 1993 until 1999, including indicators of performance within the network.

**Table 3.4: Operational Programme Indicators for Telecommunications.**

	Unit	1993	1994	1995	1996	1997	1998	1999
Rate of Digitalisation	%	70	74	77	84	85	95	100
Faults cleared in 2 days	%	85	93	96	97	96	94	90
<b>Call Failure Rates:</b>								
Local	%	0.61	0.42	0.46	0.55	0.52	0.41	0.58
STD	%	0.95	0.68	0.75	0.77	0.89	0.75	1.43
International	%	2.7	2.4	1.9	1.74	0.91	0.89	0.8
Telephone Penetration Rate	%	75	78	80	83	83	89	85

### **3.1.5 Information and Publicity**

3.1.5.1 Due to the nature of telecommunications projects under the EIOP, where a project had software loaded onto many exchanges or covered transmission systems over a wide part of the country, it was not possible for Telecom Eireann to put signs up marking the EU involvement in many of the projects. Telecom Eireann also indicated that, for security reasons, it did not identify locations or attract attention to their main exchanges where much of the work under the Programme was carried out. In order to overcome these problems and comply with the information and publicity measures, Telecom Eireann placed advertisements in the three Irish national newspapers in March 1996.

3.1.5.2 During visits by external auditors, acting on behalf of the Telecommunications Measure Leader, compliance with publicity procedures were examined. A billboard erected at the original site of the National Management Centre at Bluebell, Dublin was inspected by the audit and photographic evidence was taken. The wording in relation to EU involvement was as follows:

*'THIS PROJECT HAS BEEN PART-FINANCED BY THE EUROPEAN REGIONAL DEVELOPMENT FUND'*

A permanent plaque was also placed within the building in order to comply with the publicity requirements. The external auditors also visited the Crown Alley exchange, Dublin, which houses C7 signalling equipment, and confirmed the existence of the publicity plaque there.

### **3.1.6 Declaration of Observance of Relevant Community Policies.**

3.1.6.1 *Public procurement:* As part of the external audit on this project, the procurement procedures followed were reviewed and a number of contracts chosen for detailed testing. For each contract chosen audit obtained and inspected all relevant documentation including the originating tender, responses and evaluation documentation. Audit established, based on the tests, that procurement procedures were followed in accordance with Title 1 of Council Directive 93/98/EEC.

3.1.6.2 *Equal Employment Opportunities*: Telecom Eireann adopted a policy of equal employment opportunity for all.

3.1.6.3 *Environmental (EIS)*: The measure had no significant impact on the environment.

### 3.1.7 Files

3.1.7.1.1 The Key reference files held by the Telecommunications Measure Team are set out in Table 3.4 (Files for Telecommunications Measure).

**Table 3.5: Files for Telecommunications Measure**

EU/EIOP1	EIOP Monitoring Committee '94-'99
EU/EIOP2	EIOP Audit Trail Requirements for Economic Infrastructure Operational Programme (EIOP)
EU/EIOP3	Notification of irregularities to Planning Unit/Department of Finance/EU Commission in context of structural Funds (EIOP)
EU/EIOP4	Mid Term Review of the EIOP
EU/EIOP5	Additionality Returns under the EIOP (C.S.F.)
EU/EIOP6	Technical Assistance Programme (TAP) under the EIOP.
EU/EIOP7	EIOP Claims for funding
EU/EIOP8	EIOP Quarterly Returns
EU/EIOP9	EU Commission Audit of Telecommunications EIOP Measure
EU/EIOP10	Closure of EIOP

## 3.2 Postal Measure

3.2.1 The EIOP Postal Measure enabled An Post to extend counter automation to 400 Post Offices (**listed at Appendix 13**) located primarily in rural areas to bring service availability at these offices to the level pertaining at the 600 mainly town/urban based offices previously automated. (Phase 1 of the Counter Automation Project).

3.2.2 Eighty-five per cent of An Post counter business was generated at the 600 offices with 10% originating at the 400 offices in Phase II (EIOP). The scheme enables the 400 offices to offer the full range of Post Office based counter services and specifically enables them to participate in card based automated services for bill payment and welfare disbursement resulting in social and commercial benefits to rural based consumers and to the workers in the offices concerned.

3.2.3 The Phase II initiative was implemented between 1997 and 1998. Bill payment business through An Post has grown by over 50% between 1997 and 2001.

3.2.4 The Postal Measures included in the EIOP for co-financing assistance are as follows:

### *3.2.4.1 Regional Mail Centres*

This includes the development of regional mail centres at:

- a. Portlaoise
- b. Athlone
- c. Sligo
- d. Galway

-- *Athlone Mails Centre*: Completed in 1994, the Athlone Mails Centre operates as an integrated Letter Forwarding Office serving the surrounding counties and acts as a transit centre for the Galway and Sligo mail centres.

-- *Portlaoise Mails Centre*: The Portlaoise Mails Centre was completed in 1996. Between 1997 and 2000 it served as an integrated Letter Forwarding Office serving the surrounding counties. In 2000, automated sorting equipment was installed and now Portlaoise handles approximately 60m items per year. It will serve as the primary processing hub for the Leinster area (excluding Dublin).



-- *Sligo Mail Centre*: Sligo Mails Centre was completed in 1998. It facilitated the move of Letterpost operations from the old Post Office building which did not have sufficient capacity to handle the increasing volumes. It serves counties Donegal, Sligo, Leitrim and Roscommon and processes approximately 37 million items per year.

--*Galway Mail Centre*: Construction work finished in December 2000 and fit out was completed during the first quarter of 2001. The centre facilitated the move from the old Post office building which did not have sufficient capacity or adequate access for large vehicles. It processes approximately 60m items per year.

3.2.4.2 *Counter Automation*: 400 rural offices were automated under Phase II which was completed in 1998. This brought the number of automated offices in the network to 1,000. The automation of these offices increased the transaction processing capacity at the offices and enables offices to provide a quicker and more efficient service to customers.

3.2.5 *Performance Indicators for Postal Services*: Specific performance targets agreed for the postal investments in the CSF include:

- Rate of overnight delivery achieved
- Postal charges as % of EU average

Up to 1997, the next day delivery performance monitor – the MRBI monitor – was used to measure performance of a limited number of mail types and routes. In mid 1997, following the receipt of the EIOP grant, work began on the development of a new monitor – EIREX – designed to monitor all types of mail across a significantly increased number of routes. In order to assess the impact on measured performance, the new monitor was run in parallel with the existing monitor throughout Quarter 4 1997. The results showed that the figures for next day delivery performance (for all mail types, across the increased number of routes) equated to 83% next day delivery under EIREX as opposed to 95% reported for the MRBI monitor results.

3.2.6 As a consequence of this, An Post took the decision to formally adopt a new, lower EIREX figure as a more accurate representation of real mail performance, and to use this figure as a baseline for setting future performance targets. Throughout

1998, the company deployed significant effort to increase the measured performance from the 83% baseline to the company's own target figure of 88% next day delivery (all mail types) by year end. The performance objective set for 2001 was to achieve 90% minimum by next day delivery performance for all mail types. The results achieved under the original MRBI up to 1997, the results for 1998 to 2000, and the results for 2001 are shown in the Table below.

3.2.7 With regard to postal charges, the objective was to reduce such charges from 113% in 1993 to 100% by 2001 in relation to the EU average. The EU average tariff is calculated by comparing the cost of the national standard postal rates for a 20 gram letter, translated to Euro at the prevailing exchange rate in force on the date of calculation. On 6 April 1998, An Post reduced its basic domestic letter rate by 6.25% to 0.30p, placing it below the EU average of such charges. By the end of 2000, the domestic tariff for Ireland equated to 83% of the EU average domestic tariff.

3.2.8 The Table below summarises the performance of An Post to the end of 2001.

**Table 3.6: Operational Programme Indicators for Postal Services**

<b>Indicator</b>	Unit	1993	1994	1995	1996	1997	Q4:1997	1998	1999	2000	2001
<b>Monitor</b>	MRBI	MRBI	MRBI	MRBI	MRBI	MRBI	MRBI 95	Eirex	Eirex	Eirex	Eirex
<b>Overnight Delivery</b>	%	94	91	92	92	95	Eirex 83	86	88	89	87
<b>Postal * Charges</b>	%	113	106	98	107	94	N/A	90	84	83	82

\*In relation to EU Average

3.2.9 In addition to the CSF indicators for the overnight delivery and postal charges, the Operational Programme makes specific provision to monitor the performance of the Postal Service Investment at a more detailed level. The detailed measures required are letter and parcel volumes through the mails centres earmarked for assistance under OP. With regard to the Athlone, Portlaoise and Sligo mail centres, the Table below, provides details of the performance of the centres from 1996-2001.

**Table 3.7: Letter and Mail Volumes through Athlone, Portlaoise and Sligo Mail Centres**

<b>Indicators &amp; Mails Centre</b>	1996	1997	1998	1999	2000	2001
<b>Athlone Letter Volumes</b>	25m	31m	56m	58m	60.9m	66m
<b>Athlone Parcel Volumes</b>	1.5m	1.8m	2.1m	2.2m	2.3m	2.5m
<b>Portlaoise Letter Volumes</b>	-	29m	39m	40m	42m	46.2m
<b>Portlaoise Parcel Volumes</b>	-	-	2.3m	2.5m	2.6m	2.9m
<b>Sligo Letter Volumes</b>	-	-	26m	27m	28.4m	31.2m
<b>Sligo parcel Volumes</b>	-	-	.2m	.2m	0.21m	0.23m

3.2.10 The Minister for Public Enterprise officially opened the Mail Centres at Sligo and Galway. Plaques were also positioned at the entrances at each of the four Mail Centres, indicating that their construction had been grant aided by the EU. At the commencement of the EIOP a Press Release was issued by the GIS on the projects which were to be grant aided under the programme, including the automation of the rural sub post offices.

3.2.11 An Post is the only universal service postal provider in the State. An Post confirmed that the Mail Centre construction contracts were awarded on the basis of open competitive tenders and the independent verification audits have confirmed that expenditure was at arms length. The only major purchase which did not go out to tender was the purchase of automation equipment from the then An Post subsidiary PostGem.

3.2.12 The contracts for the construction each of the Mail Centres were awarded on the basis of open competitive tendering and the developments were subject to the relevant Local Authority Planning Permissions and controls. These controls did not

include a requirement for an Environment Impact Assessment. An Post is an Equal Opportunities Employer.

3.2.13 Expenditure on the postal services measure including compliance by An Post with the regulatory controls was subjected to audits (see chapter 6.10) by KPMG Chartered Accountants, Chapman Flood Mazars Chartered Accountants, the Internal Audit Unit of the Department and the ERDF Financial Control Unit of the Department of Finance. A full report was made to the EU Commission as a result of Irregularities identified by the ERDF Financial Control Unit and refunds made to the EU Commission. The irregularities concerned were once off in nature, not systemic.

3.2.14 The Measure contributed to the securement of employment in the 400 rural sub post offices (**listed at Appendix 13**) by enabling them to offer the full range of services through the automated network. The reorganisation and restructuring of mail services by An Post, which included the establishment of the regional Mail Centres, enabled An Post to provide a more efficient and higher quality service to customers. The projects which were grant aided under the Measure will enable An Post to compete more effectively in an increasingly liberalised and technologically developing market thereby contributing to the retention of employment in the mail delivery sector in the longer term.

**Table 3.8 : Expenditure by project and on an annual basis**

**EIOP - Analysis of Expenditure by Year**

		1994	1995	1996	1997	1998	1999	2000	2001	Total Expenditure	Total Grants	
								Qtr 1	Qtr 1			
Athlone Mails Centre	Expenditure	2,082,828	284,519	35,861	16,867	0	0	0	0	2,420,075		
	<b>Grants Claimed</b>	<b>974,731</b>	<b>133,072</b>	<b>16,855</b>	<b>7,927</b>						<b>1,132,585</b>	
	<b>Manpower grant claimed</b>	<b>4,199</b>	<b>651</b>								<b>4,850</b>	
Portlaoise Mails Centre	Original Expenditure	39,076	412,039	2,965,472	965,364	372,854	25,038	0	0	4,779,843		
	Adj for irregularity					(15,780)	(8,859)			(24,639)		
	Revised expenditure	39,076	412,039	2,965,472	965,364	357,270	16,179	0	0	4,755,204		
	<b>Grants Claimed</b>		<b>176,284</b>	<b>1,404,188</b>	<b>450,449</b>	<b>171,805</b>					<b>2,202,726</b>	
	<b>Manpower grant claimed</b>	<b>18,366</b>	<b>3,973</b>	<b>2,985</b>	<b>1,451</b>						<b>26,775</b>	
Counter Automation Phase II	Original Expenditure			2,334,501	773,170	60,101	0	0		3,167,772		
	Adj for irregularity			(233,909)	(118,225)					(352,134)		
	Revised expenditure			2,100,592	654,945	60,101	0	0	0	2,815,638		
	<b>Grants Claimed</b>			<b>1,089,526</b>	<b>359,198</b>	<b>28,247</b>					<b>1,476,971</b>	
	<b>Subsequently Repaid</b>			<b>(109,937)</b>	<b>(55,566)</b>						<b>(165,503)</b>	
	<b>Manpower grant claimed</b>			<b>7,689</b>	<b>4,192</b>						<b>11,881</b>	
Sligo Mails Centre	Original Expenditure			6,122	751	1,527,895	382,187	86,652		2,003,607		
	Adj for irregularity					(56,564)	(22,821)			(79,385)		
	Revised expenditure			6,122	751	1,471,331	359,366	86,652	0	1,924,222		
	<b>Grants Claimed</b>			<b>2,878</b>	<b>353</b>	<b>330,779</b>					<b>330,779</b>	
	<b>Manpower grant claimed</b>										<b>3,231</b>	
Galway Mails Centre	Expenditure			1,515	1,016	0	23,740	1,969,338	2,009,446	4,005,055		
	<b>Grants Claimed</b>			<b>712</b>	<b>478</b>			<b>330,482</b>			<b>330,482</b>	
	<b>Manpower grant claimed</b>										<b>1,190</b>	
Total	Original Expenditure	2,121,904	696,558	5,343,471	1,757,168	1,960,850	430,965	2,055,990	2,009,446	16,376,352		
	Adj for irregularity	0	0	(233,909)	(118,225)	(72,344)	(31,680)			(456,158)		
	Revised expenditure	2,121,904	696,558	5,109,562	1,638,943	1,888,506	399,285	2,055,990	2,009,446	15,953,301		
	<b>Grants Claimed</b>	<b>974,731</b>	<b>309,356</b>	<b>2,510,569</b>	<b>817,574</b>	<b>530,831</b>	<b>0</b>	<b>330,482</b>			<b>5,473,543</b>	<b>£5,473,543</b>
	<b>Manpower grant claimed</b>	<b>22,565</b>	<b>4,624</b>	<b>14,264</b>	<b>6,474</b>						<b>47,927</b>	<b>€7,099,064</b>
	<b>Subsequently Repaid</b>			<b>(109,937)</b>	<b>(55,566)</b>						<b>(165,503)</b>	
	<b>Total</b>	<b>997,296</b>	<b>313,980</b>	<b>2,414,896</b>	<b>768,482</b>	<b>530,831</b>		<b>330,482</b>			<b>5,355,967</b>	
<b>TAP Grants</b>				<b>62,920</b>	<b>172,080</b>						<b>235,000</b>	
<b>Total EIOP Grant</b>										<b>IR£5,590,967</b>		

## 3.3 Broadband Infrastructure Measure

### 3.3.1 Background

3.3.1.1 As part of the EIOP, launched in July 1994, the deployment of high-capacity telecommunications networks to over 120 towns and cities around the country was assisted by funding of over €26 million. Funding was made available to support 12 broadband projects under EIOP.

3.3.1.2 The Government actively supports the emergence of the information Society in Ireland. Initiatives such as communications, e-Government, education, business-to-business e-Commerce and residential services have been driven by the recognition of the importance of the Information Society to the future economic and social development of the country.

3.3.1.3 The Information Society is particularly important for the Irish economy, with its very open trade environment and its strength in a number of high-tech sectors. A core responsibility of the Department of Public Enterprise is the development of communications infrastructure that will enable the provision of a full range of advanced communications services. Investment by telecommunications operators provides the main thrust of infrastructural investment. EU Structural Funds also play a major role in the development of telecommunications infrastructure in Ireland.

3.3.1.4 Broadband is a term used to describe high rates of electronic data transfer. It has emerged as a vital tool in all industries, in facilitating e-commerce, in allowing for delivery of Government services and facilitating education and healthcare services and communications generally. Broadband services can be provided over fibre-optic cable, traditional copper wires using Digital Subscriber Line technology, hybrid fibre/coaxial cable, and wireless transmission.

3.3.1.5 As part of the Economic Infrastructure Operational Programme (EIOP), launched in July 1994, the deployment of high-capacity telecommunications networks to over 120 towns and cities around the country was assisted by funding of over £16.5 million (*€21 million*). Funding was made available to support 12 broadband projects under EIOP. From the outset, Community procedures and policies were applied to each project.

### **3.3.2 Objectives**

3.3.2.1 The funding objectives were to:

- promote the development in Ireland of advanced telecommunications infrastructure on a par with the most advanced in the EU.
- to seek to ensure that Ireland is in a position to exploit the potential offered by the new technology.

3.3.2.2 Proposals for funding needed to demonstrate their ability to:

- enhance the capacity of the economy
- improve competitiveness, and
- reduce Ireland's peripherality.

3.3.2.3 The main aim was to address the perceived gap emerging between broadband infrastructure availability in core areas and that available in the peripheral locations. The regional locations chosen represented areas where there was low or marginal commercial viability of broadband services, but where demand could be developed. The selected locations included major industrial estates, business parks and areas representing a high density of ICT-based growth sectors. The rollout to users would be at a level of 2 Mbit/s and above, and prices would be pitched at a competitive level.

### **3.3.3 Tenders**

3.3.3.1 The Invitation to Tender document for "Structural Funds Investment in Broadband Telecommunications Infrastructure" was issued on 20 July 1999, with a closing date of 16 August for receipt of proposals. Norcontel (Ireland) Ltd., on behalf of the Department of Public Enterprise, conducted the tender and evaluation process.

3.3.3.2 Proposals were evaluated using weighted criteria published in the Invitation to Tender document, and 13 projects were selected for funding. The total funding for

12 projects from EIOP was €23,955,000. The twelve projects leveraged a total investment of €68 million.

### **3.3.4 Projects**

3.3.4.1 The projects covered a range of initiatives including network extension and enhancement, competitive infrastructure provision, and the roll-out of urban and metropolitan rings. Infrastructure projects are not intended primarily as profit-making in the short to medium term, but are seen as delivering less-tangible benefits such as opportunities for development and future planning of similar investments. The availability of EU funding has made it possible for telecoms providers to undertake to serve the regions with a broadband network, and to advance the timescale for ADSL service capability in the areas covered.

Network extension. This included extensions to the backbone networks operated by ESAT and Eircom. The ESAT network was extended from Sligo to Ballina, from Athlone to Claremorris, and from Cork City to Carrigtwohill. Eircom extended its existing network in Co. Donegal to cover the western part of the county in a ring structure with enhanced resilience.

Network enhancement. This involved the upgrading of Eircom's existing infrastructure to facilitate the provision of modern broadband services, in a backbone along the western seaboard from Cork to Sligo. The network connection between Birr and Tullamore was also enhanced, and towns along the improved network were provided with broadband access nodes in preparation for Digital Subscriber Line services. A 32km link was installed on a route connecting Galway to Castlebar, and linking with Westport, Aille, Ballinrobe, Kilconly, Kilmaine, Tuam and Claregalway.

Competitive infrastructure supply. In addition to extensions to existing networks, new backbone optic fibre has been installed which will extend the choice of carrier to additional areas. ESAT completed its Western Digital Corridor linking Dublin, Galway and Limerick, while Chorus installed a new backbone linking Ennis to Cork.

Urban Roll-out and Metro Rings. Industrial estates, business parks, and areas with a high demand for broadband were upgraded, with the replacement of coaxial cable with fibre optics. Chorus upgraded its networks in Thurles, Kilkenny, Clonmel and Castlebar, while ESAT installed fibre in Sligo, Dundalk, Maynooth, Athlone, Galway,



Carlow, Thurles, Clonmel, Limerick, Cork and Tralee. Ntl extended their Dublin network to the Tallaght Industrial Estate.

3.3.4.2 Ireland's National Education and Research Network, known as **HEAnet**, established a high-speed backbone connecting universities, educational and research establishments and Government agencies and Departments in a network with dedicated high bandwidth connections to Europe and beyond. The network serves over 150,000 staff and students in Ireland, with direct links to the UK, Canada and the US.

Directly connected institutions include:

- CAO - the Central Applications Office
- CMOD - Department of Finance
- Dublin City University
- Dublin Institute for Advanced Studies
- Dublin Institute of Technology
- Enterprise Ireland
- Environmental Protection Agency
- Higher Education Authority
- Institute of Technology Network
- NUI Maynooth
- National College of Art and Design
- National College of Ireland
- National Library of Ireland
- National University of Ireland
- NUI Galway
- Royal College of Surgeons in Ireland
- Royal Irish Academy
- Trinity College Dublin
- Teagasc
- Tipperary Rural Business Development Institute
- University College Cork
- University College Dublin
- University of Limerick.

3.3.4.3 To ensure that it remains at the forefront of technical development worldwide, HEAnet maintains membership of leading network associations –

TERENA – Trans European Research and Educational  
Networking Association

DANTE - Delivering Europe’s 155 Mbps international network

Internet2 - International partner in Internet2/NGI activities

INEX - Irish Neutral Exchange Association

RIPE - Reseas IP Europeennes

### 3.3.5 Funding and Aid Rates

3.3.5.1 The level of aid varied between projects. Determination of the rate of funding under EU State Aid regulations involved assessment and consideration of existing infrastructure, the viability of the project, and the potential benefits to users. Several of the 12 EIOP Broadband projects attracted the highest aid rate of 47%, while others received lower rates between 34% and 45%. One project – the 114kms Ennis to Cork link – received 14.8%.

**Table 3.9: Broadband Funding**

	1994	1995	1996	1997	1998	1999	2000	2001	Total
<b>IR Spend</b>	0	0	0	0	0	13,350,765	23,340,213	7,562,738	44,253,716
<b>ERDF</b>	0	0	0	0	0	5,027,420	8,789,086	2,847,856	16,664,362
<b>Spend €</b>	0	0	0	0	0	16,951,975	29,635,957	9,602,696	56,190,628
<b>ERDF €</b>	0	0	0	0	0	6,383,507	11,159,837	3,616,031	21,159,375

### 3.3.6 Timescale

3.3.6.1 The projects selected for assistance were implemented during 2000-2001. During this period the infrastructure was installed, and in certain instances new services were rolled out to local users.

### 3.3.7 Files and Project Summaries

3.3.7.1 A separate folder/archive of documents pertaining to each project is filed with the Telecommunications (Broadband) Measure Team.

3.3.7.2 An individual financial summary sheet has been created for each of the 12 Broadband projects, and these are kept on file in the Broadband Measure.

### 3.3.8 NCC Information Technology Performance Indicators

The Annual Competitiveness Report of the National Competitiveness Council (NCC) for 2001 has produced comparative *Information Technology* data that place Ireland's costs in an international context for a range of aspects of Broadband Technology. The data for 2000, as reproduced in the National Competitiveness Council's Report for the year 2001.

**Table 3.10 Access to Telecommunication Technologies Indicators**

	Indicator	Key Indicator: Broadband Access – lines per 100 population	International interest bandwidth (M/bps) per 100 population	Internet hosts per 1000 population	Websites including gTLDs per 1000 population (estimated)	Key indicator: Secure web servers for electronic commerce per million population
Ireland	Value	0.01	0.06	23.6	5.3	47.8
	Rank	25	14	18	17	12
	Year	2000	1999	Jan 01	1999	2000 (March)

### Communication Technologies Indicators, Contd.

	Indicator	Mobile subscriptions (per 100 capita)	Key indicator: Number of PCs per 100 population (index: US=100)	Percentage of population using internet (index: US=100)	Percentage of Primary Schools linked to the internet (as of Feb 2001)	Percentage of secondary schools linked to the internet (as of Feb 2001)
Ireland	Value	48.0	59.0	45.0	100	100
	Rank	12	9	9	1	1
	Year	2000(August)	2000 (Autumn)	2000 (Autumn)	2000	2000

### 3.3.9 Verification, Evaluation, Irregularities and Audit

3.3.9.1 The matters of verification, evaluation, irregularities and audit, for the Broadband Infrastructure Measure, are dealt with in Chapter 6.

**Table 3.11: The table below lists the projects funded under this Measure**

<b>Tender</b>	<b>Project Description</b>	<b>Total Investment €million</b>	<b>EIOP Funding €million</b>	<b>% Aid rate</b>
Cablelink <b>(now NTL)</b>	Deployment of fibre optic cable from the Cablelink headend at Terenure to a node at Belgard Road in order to serve SME's in the Tallaght area.	2.2	1.0	45.5%
CMI <b>(now Chorus)</b>	Design and construction of a hybrid fibre coaxial infrastructure in Castlebar.	1.65	0.777	47%
Eircom	Development of high capacity fibre optic infrastructure in 75 towns along the West coast from Sligo to West Cork.	13.42	5.723	42.6%
Eircom	Provision of optical fibre cable along a 32 km link connecting Galway and Castlebar, and a 40 km link between Birr and Tullamore improving access to broadband infrastructure and services.	1.693	0.796	47%
Eircom	Rollout of fibre optic cable in urban areas including Cork, Galway, Dundalk, Thurles, Carlow, Tralee, Athlone, Sligo, Maynooth, Letterkenny & Limerick.	4.2	1.9	45.2%
Esat Telecom	Extension of Esat's national fibre optic network to Mayo, Roscommon and Sligo covering the towns of Athlone, Ballina, Claremorris, Roscommon, Castlerea, Ballyhaunis, Sligo and Collooney.	5.0	1.9	38%
Esat Telecom	Extension of Esat's national fibre optic network from Cork to Little Island to Carrigtwohill (21 kms).	1.22	0.573	47%
HEAnet	HEAnet is a not-for-profit organisation delivering managed broadband services to over 30 educational/research institutions throughout the State.	2.22	1.0	45%
Irish Multi-Channel <b>(now Chorus)</b>	Provide 114 km of optical fibre network linking the towns of Ennis, Shannon, Limerick, Kilmallock, Charleville, Mallow and Cork.	7.736	1.143	14.8%
Ocean <b>(now ESAT)</b>	Construction of a high capacity fibre optic digital corridor linking Dublin, Athlone, Galway and Shannon and 30 locations en route.	17.46	6.0	34.4%
Suir Nore Relays <b>(now Chorus)</b>	Hybrid Fibre Co-axial cable upgrades and Digital MMDS upgrades in Clonmel and Kilkenny.	4.41	2.0	45.4%
Suir Nore Relays <b>(now Chorus)</b>	Upgrade and extend existing cable network in Thurles to provide broadband infrastructure and services addressing business, educational and residential sectors.	2.724	1.143	42%
<b>Investments</b>		<b>63.933</b>	<b>23.955</b>	<b>37.5%</b>

## Section 3.4 – E-Commerce

### 3.4.1 Introduction

3.4.1.1 The Irish Government has consistently demonstrated its commitment to ensuring Ireland's role as a leading European digital player, for the benefit of industry, consumers and investors. Meanwhile, companies are adopting new technology to lower costs and enhance their profile for provision of customer service.

3.4.1.2 In 1999, the effect of these trends became evident in the form of an industrial need to implement new client-centred business models, with an emphasis on customer relationship management emerging. E-Commerce technologies played an important role in supporting and defining these new business models.

3.4.1.3 In order to stimulate this type of development in Ireland, in July 1999 an e-Commerce Corporate Infrastructure Programme was launched, supported by the European Regional Development Fund. The €2.5m Measure under the EIOP was expected to leverage €7m of total expenditure.

- Total Grant Aid Available from the EIOP fund: €2.5m.
- Total Grant Aid distributed: €2,132,154
- Total Project Expenditure: €6,915,161

3.4.1.4 The fundamental aims of the programme were:

- To provide a National e-Commerce infrastructure.
- To facilitate regional development through e-Commerce.
- To exploit the economic potential of e-Commerce and position Ireland as a global competitor in the field.

3.4.1.5 The funding programme for this E-Commerce Measure was announced on 5<sup>th</sup> July 2000 and applicants were invited from all players in the Information Technology and Communications sector. Projects supported ranged from the agricultural business

to the freight business, encouraging the universal acceptability of e-Commerce. The projects were also geographically dispersed across Ireland as is evident from the location of companies as attached.

**Table 3.12: E-Commerce Expenditure**

	1994	1995	1996	1997	1998	1999	2000	2001	Total
<b>IR Spend</b>	0	0	0	0	0	1,745,153	2,368,675	0	4,113,828
<b>ERDF</b>	0	0	0	0	0	693,707	922,872	0	1,616,579
<b>Spend €</b>	0	0	0	0	0	2,215,887	3,007,597	0	5,223,484
<b>ERDF €</b>	0	0	0	0	0	880,826	1,171,806	0	2,052,632

### 3.4.2 Information and Publicity

3.4.2.1 The launch of the Measure took place in Dublin Castle, on 26<sup>th</sup> October 1999. The Minister for Public Enterprise, Mary O'Rourke, her officials, and representatives of the Department of Public Enterprise (DPE), Department of Finance, Department of Enterprise, Trade and Employment (DETE), Department of the Taoiseach, personnel from participating companies, Government Agencies, the media and others attended this event. It included a Ministerial speech and a presentation made by the DPE and Stratel addressing the objectives and requirements of the Measure including project management, reporting, publicity and funding.

3.4.2.2 This launch was seen as a means of further educating the participants on the procedures involved in the measure and as a means of personally answering any arising queries.

3.4.2.3 The launch was also a medium from which to create public awareness of the measure and in particular the EU support in enhancing the e-commerce environment in Ireland.

3.4.2.4 Additionally, all companies fully collaborated in the preparation of a book of case studies titled "*e-Business Case Studies, e-Commerce Corporate Infrastructure Programme, Department of Public Enterprise*", which collated the results of the programme and presented case studies of each project. This book is still widely used to promote and disseminate the work of the programme.

3.4.2.5 Over 2000 copies of the book were distributed widely to industry, Government Departments and Agencies, IBEC, education establishments and the media.

3.4.2.6 The programme was formally concluded at a major event in Dublin Castle in October 2000, at which the Minister addressed over 300 guests drawn from industry, Government Departments, Government Agencies, IBEC, education establishments and the media.

3.4.2.7 On an ongoing basis, the public was made aware of this Measure through positive press and Internet media coverage.

### **3.4.3 Declaration of observance of relevant community policies:**

3.4.3.1 In terms of observance of relevant community policies, in relation to this Measure, the following should be noted:

- Public procurement issues were adhered to in accordance with EU Directive 93/38. The Call for Proposals was issued in the national media and posted to the Department of Public Enterprise website ([www.ecommerce.gov.ie](http://www.ecommerce.gov.ie)), The Department received 54 tenders. Following a “multistage”, open and fair evaluation process, 25 projects were selected to participate in this measure. The maximum grant available was limited to IR£118,135. Therefore, the Call for Proposals did not have to appear in the Official Journal.
- For the position of E-Commerce Infrastructure Measure independent consultant, an invitation to tender was issued to 7 companies. Three companies submitted tenders. All submissions received a formal evaluation by a committee drawn from the DPE and DETE following which the contract was awarded to Stratel.

### **3.4.4 Measures to ensure observance of these policies**

3.4.4.1 Monitoring: In order to be able to evaluate the progress of the funded e-commerce infrastructure projects, the Measure Teams requested monthly reports from each of the 25 projects. In addition an independent consultant, Stratel, was retained to evaluate project proposals. The consultant was also responsible for monitoring project progress in each participating company. Special attention was paid to the benefits of the project for the Irish business community, and to the lessons learned, and the eligibility of the project costs. Personnel from Stratel and the Department of Public Enterprise conducted 100 percent site visits. During these visits the project owner gave an explanation of the progress and possible problems and displayed results. The site visits were conducted in December 1999 and March 2000. In addition to this Stratel compiled two reports.

### **3.4.5 Outputs and impacts achieved**

3.4.5.1 Information in relation to these matters is provided in **Appendix 14** to this Final Report

### **3.4.6 Impacts on employment and environment**

3.4.6.1 This Measure facilitated the creation and maintenance of permanent jobs, especially in disadvantaged regions, by initiating the development of an e-Commerce infrastructure that enabled local industries to transact business independently of geographical location.

3.4.6.2 On a National scale the programme assisted Ireland to compete in the global market by enhancing our economic capacity, improving our competitiveness and overcoming the disadvantages of our peripherality and isolation from the European mainland. It enabled the Irish economy to exploit the potential offered by new technology and to help sustain and develop Ireland's pace of development within the European Union.

3.4.6.3 Furthermore, by initiating the establishment of an e-Commerce infrastructure, the programme supported and accelerated the implementation of the Information Society in Ireland in accordance with the Action Plan, "Implementing the Information Society in Ireland", published by the Irish Government in January 1999.



### 3.4.7 Evaluation, Impact of the Programme

3.4.7.1 The programme exploited Ireland's e-Commerce potential by developing real solutions, accelerating commercial activity and creating a critical mass of e-businesses. The intention was to create a cadre of early entrants.

3.4.7.2 A focal point of the programme was the development of an expertise and infrastructure in order to facilitate the uptake of e-Commerce as a business process by Irish industry. Building an e-Commerce environment of systems, infrastructures and know-how by users greatly improves the ability of SMEs, in particular, to compete internationally.

3.4.7.3 The projects supported in this programme ranged from the creation of a European electronic trading hub to the creation of an electronic marketplace for individual arts and crafts designers, in many cases working from remote rural locations. The projects created innovative new business models, transformed the business value chain and applied the latest Internet development technologies such as Java Beans.

3.4.7.4 The Annual Competitiveness Report of the National Competitiveness Council (NCC) for 2001 has produced comparative *Information Technology* data that place Ireland's costs in an international context for a range of aspects of E-Business. The data for 2000, as reproduced in the National Competitiveness Council's Report for the year 2001 is summarised in the table below.

**Table 3.13: Access to Communications Technologies, Indicators**

	Indicator	Key Indicator: Value of online Business-to-consumer transactions billions (\$) per million population	Value of online Business-to-consumer transactions (\$) per million population (forecast)	Key indicator: Value of online business-to-business transactions billions (\$) per million population	Value of online business-to-business transactions billions (\$) per million population (forecast)
Ireland	Value	0.02	0.18	0.36	1.03
	Rank	11	4	15	4
	Year	2000	2002	2000	2002

#### Access to Communication Technologies, Indicators Contd.

	Indicator	Key: Business-to-consumer e-commerce sales – number of buyers per 000 population	Percentage of SMEs connected to the internet	Percentage of SMEs using the internet for information purposes	Key Indicator: Percentage of SMEs using the internet for distribution purposes
Ireland	Value	10.8	58	22	3
	Rank	13	3	6	11
	Year	1998	1999	1999	1999

### 3.4.8 List of projects, showing grants awarded and total eligible expenditure.

3.4.8.1 The table below lists the projects under this Measure, together with the amount of grant awarded and the total eligible expenditure.

**Table 3.14: List of Projects**

<b>Company</b>	<b>Project</b>	<b>Funding IR£</b>	<b>Project Location</b>
Anshe/An Post	Internet Based shipping suite for SME's based on An Post shipping services.	93,760.00	Dublin
Aspect Software International Ltd	Internet based bill presentment.	64,600.00	Dublin
Comit Gruppe and Macalla Software	E*Laser electronic debit car payment system.	20,439.60	Dublin
CR2 Ltd	Credit union services via Internet and Internet-enabled mobile phones.	15,685.14	Dublin
Creative Labs Ltd	Internet based Technical Support	118,134.80	Dublin
Datacare Software Group Ltd	E-sec corporate secretarial software infrastructure	40,720.00	Monaghan
Deloitte & Touche/UCD	Centre of excellence for e-Commerce.	30,000.00	Dublin
EDI Factory Ltd	Standardised e-Commerce transaction server.	55,355.20	Dublin
Fore Systems	Portal website on Network Management.	50,778.36	Dublin
Halcyon Systems Ltd	Internet-based Infrastructure for Irish independent vegetable growers industry.	118,134.84	Monaghan
IBM IISL	e-Commerce enabled Customer Relationship Management for Industry Insurance.	54,985.60	Dublin
Icarus Marketing Ltd	Integrated supply chain management process conversion to e-Commerce.	83,440.00	Dublin
ICL Project 1	Trading Community Hardware and infobank Development.	98,897.20	Dublin
ICL Project 2	Trading Community managed service, ICL development and localisation and marketing & sales.	103,004.00	Dublin
IT Solutions	Web-based Customer Support Systems.	36,136.00	Dublin
Kilkenny Information Age Ltd.	e-Commerce craft studio and database of Irish crafts/design companies.	27,494.89	Kilkenny
Local Ireland	Events Information management System.	102,876.80	Dublin

Magic Lamp	On-line sales of children's education toys.	78,038.08	Kildare
Nortel Networks	e-Commerce incubator network of multimedia Customer interaction Centres for SME's.	117,952.00	Galway
Orbism Ltd	Internet Marketplace fro Java beans software components.	94,263.72	Dublin
Piercom	Web-based Contact Management.	30,464.36	Limerick
Ventilux Ltd	Web-based order processing system to integrate with computerised manufacturing system.	23,520.00	Dublin
Viking Components Europe*	e-Commerce enabled supply chain focusing on fulfilment.	62,700.00	Dublin
Waterford Internet Centre Ltd	e-Kiosk deployment in small towns and peripheral locations in Kilkenny, Waterford and Wexford.	118,135.00	Waterford
Working and Living Publications	On-line electronic publishing.	39,686.40	Kildare
Total		1,679,202	

\*Viking Components is no longer deemed eligible for EU Funding; final figures will reflect this decision.

# Chapter 4

**EIOP Sub-**

**Programme**

**: Technical Assistance**

## 4.1 : Technical Assistance - Overview

4.1 The third sub-programme of the EIOP was concerned with *technical assistance*. This sub-programme was primarily focussed on ensuring appropriate management, control, planning and appraisal of the Operational Programme as a whole. The Technical Assistance sub-programme set out to:

- upgrade management, co-ordination, control, investment planning and project appraisal on the Operational Programme;
- maintain appropriate monitoring and evaluation systems;
- provide background research as required;
- undertake feasibility and other studies directly related to the programme; and
- provide any training deemed necessary for those involved in implementing the programme.

4.2 The Technical Assistance Programme covered areas of investment, under the Operational Programme, across the postal, energy and telecommunications sectors and was used to develop better target/indicators for Measures. The details of the Technical Assistance Programme were agreed by the Irish Authorities with the European Commission following commencement of the Operational Programme and after consultation with the EIOP Monitoring Committee.

4.3 *Technical Assistance Sub-Committee:* At the first meeting of the EIOP Monitoring Committee on 15 December, 1994, it was agreed that a Technical Assistance Sub-Committee, consisting of a representative of the European Commission and representatives of the Government Department responsible for the EIOP (the then Department of Transport, Energy and Communications), would be established to evaluate requests for funding under the Technical Assistance Sub-Programme of the EIOP and to bring such requests to the EIOP Monitoring committee for approval. This decision was taken in order to ensure that requests for funding would be processed in a streamlined and responsive manner, having particular regard to the need to process suitable projects without undue delay. In setting up this Sub-Committee, it was agreed that at each meeting of the EIOP

Monitoring Committee an update would be given on co-funding decisions made by the Technical Assistance Sub-Committee. Funding requests for amounts in excess of €60,000 continued to require the approval of the EIOP Monitoring Committee.

4.4 The Planning Unit of the Department of Public Enterprise (formerly the Department of Transport, Energy and Communications) was the Measure Leader for the Technical Assistance Sub-Programme of the EIOP. The resources of the Unit were augmented, as necessary, by the engagement of consultants to carry out specific projects, not only for the Technical Assistance Sub-Programme itself, but also for other Measures within the Programme. The individual sections of Chapters 2 and 3, dealing with the individual Measures, refer to such consultancy assignments.

4.5 This chapter is presented in two parts:

- Technical Assistance (General) Measure
- IS Awareness Measure

#### **4.2 Technical Assistance (General) Measure**

4.2.1 One significant assignment was the consultancy work undertaken for the Mid-term Review of the EIOP. External evaluators (Indecon International Economic Consultants) were appointed to undertake the mid-term review of the EIOP. The external evaluators report prepared a detailed and rigorous independent review which evaluated in detail the impact of the Programme. The mid-term evaluation report questioned the merits of certain projects and aspects of programmes and made recommendations to improve the impact of investments under the EIOP. The report also provided detailed recommendations regarding the on-going monitoring of the programme. As discussed in paragraph 1.5.3 above, the consultants' report was given detailed consideration by the EIOP Monitoring Committee. The outcome of the Committee's deliberation is reproduced at **Appendix 4**.

4.2.2 Following a competitive tender process, Indecon were subsequently appointed as on-going external evaluators of the Programme. The work undertaken by the evaluators was in two areas. *Firstly*, in their participation at Monitoring Committee meetings during which an independent and challenging external perspective was

provided on all aspects of the programme. *Secondly*, on-going evaluation reports were prepared in advance of steering group meetings by the external evaluators.

4.2.3 It is of use for illustrative purposes to consider the specific reports prepared by Indecon in their role as external evaluators. One report related to an analysis of performance indicators and reflected the role of the evaluator in supporting the steering group to continually improve the effective monitoring of the EIOP. The second example related to a report undertaken by the evaluator on the implications for EIOP of proposed tax incentives for wind-energy and bio-mass. This report recommended that in order to minimise the impact of deadweight that individual projects should qualify for either EIOP grants or tax incentives. The evaluator recommended that projects which received EIOP grants should not be eligible for tax incentives and vice versa. This is illustrative of the typical inputs made by the external evaluator which had the impact of enhancing the overall effectiveness of EIOP funding.

4.2.4 The range of issues and reviews undertaken by the external evaluator covered all aspects of the EIOP Programme and the issues examined are too numerous to list in this report. As an illustration, however, it is useful to list examples of the work undertaken by EIOP external evaluator in the period April/August 1999. This is outlined below:

- Evaluation of proposals for projects under the broadband technology measures.
  - Review of draft annual report.
  - Review of draft minutes of EIOP Monitoring Committee.
  - Review of terms of reference for financial controls contract re the Peat Station Project.
  - Review of legal advice concerning grant aid for the Renewables Measure.
  - Evaluation of proposals re transfer of funds to the Information Society measure and establishment of E Commerce Measure.
  - On-going advice to Secretariat.

4.5.1.5 As regards other assignments, Table 4.1 provides a list of expenditure under the TAP Measure.

**Table 4.1 Technical Assistance (General) Measure**

<b>Area of Expenditure</b>	<b>Purpose of Consultancy/Expenditure</b>	<b>Measure assisted</b>
Managing Authority	Publication of EIOP Programme Complement	Entire Programme
Energy Division	Energy Statistics Study	Energy Efficiency
CSI Consultancy	Regulation of open competition to build, own, and operate new peat fired power station	Peat Generation
NERA	Cost benefit study on Peat Powered Electricity Generation Station	Peat Generation
International Energy Environment Division of Dept. to cover fees paid to panel of experts	Socio-economic study of renewable energy in Ireland	Renewable Energy
Indecon International Economic Consultants	Midterm review of EIOP External Evaluation of the EIOP	Entire Programme
Environmental Resources Management (ERM)	Socio-economic cost benefit analysis of proposed biomass fuelled electricity station	Renewable Energy
PricewaterhouseCoopers	Quality of Service Monitoring for An Post	Postal
ERM	Study on limitation and reduction of greenhouse gas emissions	Renewable Energy
ETSU	Evaluation of projects for 3 <sup>rd</sup> Alternative Energy Requirement Competition using Wind, Hydro and Waste to Energy technology (AER III) Competition	Renewable Energy
Norcontel	Evaluation of proposals following call for EU co-funded Broadband Telecommunications Infrastructure projects in the regions.	Broadband
AEA Technology	Evaluation of projects for 4 <sup>th</sup> Alternative Energy Requirement Competition using Combined Heat and Power technology (AER IV Competition)	Renewable Energy
PricewaterhouseCoopers	External Audit of EU backed expenditure by Bord na Mona	Cutaway Bogs
KPMG	External audit of EU backed expenditure by ESB	Rural Networks
PricewaterhouseCoopers	External Audit of EU backed expenditure by Eircom	Telecommunications
Helm Corporation	External audit of EU backed expenditure on Peat Generation Measure	Peat Generation



**Table 4.2: Technical Assistance Programme**

	1994	1995	1996	1997	1998	1999	2000	2001	Total
<b>Total IR</b>	31,041	31,848	112,824	208,343	475,026	112,858	15,419	48,475	1,035,834
<b>ERDF</b>	23,281	23,886	84,618	124,797	356,269	84,643	11,564	36,356	745,414
<b>Total €</b>	39,414	40,439	143,257	264,541	603,159	143,300	19,578	61,550	1,315,238
<b>ERDF €</b>	29,561	30,329	107,443	158,459	452,368	107,474	14,683	46,163	946,481

4.1.5.6 Chapters 2 and 3 refer in more detail to the consultancies funded under the Technical Assistance (General) Measure.

## **4.3 Information Society Awareness Measure (EBAC)**

### **4.3.1 Background to the Measure**

4.3.1.1 The European Commission decision of 29<sup>th</sup> November 1999 provided for an Information Society (Business Awareness) Measure. This Measure was implemented as the Electronic Business Awareness Campaign, (EBAC) and was an alliance between the Information Society Commission and the Irish Business Employers Confederation, (IBEC). The EU funding element for this Measure was 75% with the remaining 25% being provided by the alliance members equally at 12.5% each.

4.3.1.2 The total amount of EU aid available for this campaign was £197,254.

### **4.3.2 The Campaign**

4.3.2.1 The EBAC was held over two years and involved the holding of eleven seminars in different geographic locations around Ireland. During 1999, most of the seminars were aimed at particular industry sectors, e.g., the Pharmaceutical or Printing, Publishing sectors. However in 2000, all the seminars were general and aimed in particular at the small to medium business sector. Attendance at these seminars rose from eighty at the inaugural seminar to over 300 at the final seminar.

4.3.2.2 The final seminar was held in June 2000 and was attended by over 300 delegates. The Campaign was very successful in terms of making business people aware of the enormous potential that eCommerce had to offer. The success for the campaign can also be attributed to the fact that the campaign came to the business rather than vice versa. In so many cases the need to travel long distances can cause a disincentive to attend seminars, with the eleven seminars held at different geographic locations, this was not the case.

### **4.3.3 Seminars held 1999**

4.3.3.1 In 1999 most of the seminars were aimed at particular industry sectors. Outlined below are details of these seminars:

<b>Sector</b>	<b>Venue</b>	<b>Date</b>
Pharmaceuticals	Cork	05/03/1999
Software	Galway	22/04/1999
Electronics	Limerick	17/06/1999
Printing	Dublin	03/09/1999
Logistics/Transport	Dundalk	14/09/1999
General SME's	Waterford	21/10/1999
General SME's	Ennis	18/11/1999

### **4.3.4 Seminars held 2000**

4.3.4.1 In 2000, the focus switched from particular industry focused seminars to more general seminars aimed at small and medium business. The four seminars were again held at different geographic locations and are outlined below.

<b>Sector</b>	<b>Venue</b>	<b>Date</b>
General	Dublin	27/01/2000
General	Ballina	24/02/2000
General	Tralee	30/03/2000
General	Dublin	22/06/2000

### **4.3.5 Expenditure under EBAC**

4.3.5.1 The total expenditure incurred under this campaign was £263,000 and the EU aid was £197,250, representing 75% of the total.

4.3.5.2 Payments were made to the Campaign on the following dates:

£18,000	September 1999
£81,260	February 2000
£97,000	January 2001
Total: £196,260	

### **4.3.6 Compliance with Commission Decision on Information/Publicity with respect to Operational Programme.**

4.3.6.2 IBEC and the Information Society Commission adhered to the guidelines laid down by the EU in respect of publicity and information aspects with respect to the EIOP. This included written/verbal acknowledgement of EU funding support and the inclusion, where possible, of the EU Logo in:

- All printed promotional material and publications
- Stationary
- Press releases and all press statements
- Advertisements

### **4.3.7 Impact on Employment**

4.3.7.1 The creation of employment was one of the stated primary objectives of economic policy in Ireland and the EU as a whole. The Measures receiving ERDF assistance under the EIOP 1994-1999 were selected on the basis of their contribution towards the achievement of the aims and objectives of the Community Support Framework generally which included the provision of adequate infrastructure to help

offset Ireland's geographic and structural disadvantages thereby ensuring an adequate base for employment and wealth generating activity.

4.3.7.2 In this context, the investment initiatives, provided under the EIOP, had a positive stimulative role to play. Through the implementation of the EBAC improved employment opportunities arose through direct and indirect avenues.

#### **4.3.8 Promotion of Equal Opportunity**

4.3.8.1 The EBAC would have had a very positive effect with regard to equality issues. E-Commerce as an industry is not defined by gender and any opportunities with regard to employment opportunities would be available to all irrespective of gender.

#### **4.3.9 Compliance with Public Procurement**

4.3.9.1 The administration of the Measure was fully compliant with regard to Public Procurement. All the Procurement and Publicity Requirements stipulated by the EU were complied with in the implementation of each of the projects.

# **CHAPTER 5**

## **Expenditure under EIOP**

# **CHAPTER 6**

## **Audit Dimensions of EIOP**

## 6.1 Introduction

6.1.1 The European Commission Regulation (EC) No 2064/97 of 15 October 1997 established detailed arrangements for financial control by Member States of operations that are co-financed by the Structural Funds. As part of the arrangements, each Member State is required to complete control checks, on an appropriate sampling basis, of at least five per cent of expenditure under each Operational Programme of the Community Support Framework. The controls prescribed include systems control checks (Article 3 1(a) of Regulation 2064/97) and transaction test audits (as required under Article 3 1(b) of Regulation 2064/97). On 22 December 1998 the Department of Finance - the National Authority for the European Regional Development Fund (ERDF) - produced Circular 23/98 which set out how the financial management and control procedures for ERDF funded programmes (as laid down by Council Regulation (EEC) 2082/93 and Commission Regulation 2064/97) were applied in Ireland. In July 1999, the EIOP Secretariat issued its document, "Guide to Monitoring and Control of EU Funds", which set out how the financial control principles and procedures were to apply in relation to the EIOP. The EIOP also held regular workshops for the EIOP Measure Leaders and EIOP Measure Teams to remind them of their duties and responsibilities with regard to the Measures for which they had responsibility.

6.1.2 This chapter describes the implementation of the foregoing audit requirements, insofar as the Measures under the EIOP are concerned. It has particular regard to

- Audit visits by the European Commission and the ERDF & Cohesion Fund Financial Control Unit of the Department of Finance
- Systems Audits carried out by the Internal Audit Unit of the Department of Public Enterprise
- Verification Work carried out on EIOP Measures by External Auditors
- The work of the EIOP Verification Group
- The Communication of Irregularities as provided for in Article 3 and Article 5 of Commission Regulation (EC) No 1681/94 and Commission Regulation (EC) No 1831/94

- Follow-up on Transaction audits and irregularity returns.

## 6.2 Audit Visits

6.2.1 There were two main audit visits during the life of the EIOP. One by the European Commission, and the other by the ERDF & Cohesion Fund Financial Control Unit of the Department of Finance. These two audits are now looked at in turn.

6.2.2 *On-the-Spot check by DG Financial Control:* The Directorate-General for Financial Control of the European Commission carried out an on-the-spot check of the EIOP in May and June 2000. The check was based on the declaration of expenditure for 1998 which had been submitted to the Commission in 1999.

The objectives of the check were:

- to ascertain the accuracy of the expenditure declared by the designated authority in the last request for drawdown of ERDF aid,
- to examine the system of management and control of the programme by the public authorities and its functioning and
- to verify the execution of projects by final beneficiaries/project managers.

6.2.3 Three Measures were selected for the check – Peat Generation, Rural Networks and Telecommunications. Peat Generation, comprising of one major project and three projects each from the Rural Networks and Telecommunications Measures were selected for detailed examination. The check, in addition to meeting the Measure Teams and examining documentation in the Department also included site visits.

6.2.4 A report on the on - the - spot check was received in the Department in August 2000. The report was broadly favourable to the managing authority. However a number of recommendations in relation to procedures were made. These were addressed in the response to the Control Check and taken into account by the managing authority in the management of the remainder of the programme. A copy of the response to the DG Financial Control Audit Report was submitted to the Internal Audit Unit of the then Department of Public Enterprise and the Internal Audit Unit of the Department of Finance.



6.2.5 The main recommendation was in relation to the Telecommunications Measure in respect of which the report stated that ‘The designated authority (with the co-operation of DPE) is requested to carry out a full audit of the projects cofinanced by the ERDF’. PricewaterhouseCoopers, as external consultants, were engaged to carry out the audit.

6.2.7 *The ERDF and Cohesion Fund Financial Control Unit Control Check:* The ERDF and Cohesion Fund Financial Control Unit of the Department of Finance carried out a control check of the EIOP in May June 2000. The overall objectives of the control check were to:

- examine the effectiveness of the management and control systems in place in the organisations and
- test the audit trail for selected expenditure by tracing amounts from the ERDF claim back to original documentation.

6.2.8 The expenditure return submitted to the European Commission for the period January to December 1998 was selected for the verification of the audit trail. The Energy Efficiency Measure and the Postal Measure were selected for examination during the control check. In addition to examining documents held by the EIOP Secretariat and the relevant Measure Teams in the then Department of Public Enterprise, the control check also involved visits to the Irish Energy Centre and An Post, and to a sample of final beneficiaries.

6.2.9 A report on the control check was received in August 2000. All of the issues raised in the report were addressed and relevant changes in procedures were implemented. Reports on the various issues, including Irregularity Reports were sent to the Department of Finance in the period following receipt of the Control Check Report. A second cycle follow-up was undertaken by the Unit in December 2001, following which a comprehensive response was submitted by the EIOP Secretariat to the ERDF and Cohesion Fund Financial Control Unit and to Internal Audit Unit, Department of Finance. The Reports completed by way of follow-up to this control check are on file at the EIOP Secretariat.

## 6.3 EIOP Verification Group

6.3.1 As part of the Closure Process for the EIOP, the EIOP Secretariat oversaw verification checks of the individual Measures under the EIOP. The verification checks were carried out in the Divisions of the then Department of Public Enterprise that have responsibility, both as Measure Leaders and Measure Teams, for the different Measures under the EIOP. The checks were designed to complement checks that have been carried already on the EIOP Measures, by external consultants and external auditors.

6.3.2 The verification checks that were undertaken on the EIOP Measures related to Article 3.1 (b) of EC Regulation 2064/97; that Article refers specifically to the need to “... *verify selectively, on the basis of risk analysis, expenditure declarations made at the various levels concerned*”. The specific focus of this series of checks was on the Divisions themselves, having regard to their role as EIOP Measure Teams. The accompanying article of the Regulation, Article 3.3, gave guidance as to the controls that had to be taken into account in the selection of projects for verification.

6.3.3 The verification process was carried out using the Verification Checks set out in the Questionnaire attached at **Appendix 15** using the services of the EIOP Verification Group, that was convened especially for this purpose from within the then Department of Public Enterprise. That Group reported during July-August 2002 to the EIOP Secretariat on the outcome of its work. The Group liaised with individual EIOP Measures to facilitate completion of the questionnaire. The Questionnaire was discussed at the EIOP Workshop that took place on 4<sup>th</sup> April 2002. It was also considered by the EIOP Verification Group at its meeting on 12<sup>th</sup> April 2002. This final version took into account the views of those who supplied comments and observations.

## 6.4 Peat Generation Measure

6.4.1 Peat Generation underwent a comprehensive *Verification Check* by Helm Consultants; a *Systems' Audit* by Andersen consulting; and a *Control Check* by EU DG Financial Control.

6.4.2 Very definite steps were taken undertaken in relation to the Peat Generation Measure to ensure that EU policy requirements were adhered to. As part of the monitoring of these policies, the General Manager of the Peat Generation Project submitted detailed monthly progress reports to the Peat Generation Measure Team. These progress reports were used as briefing material for the EIOP Monitoring Committee.

6.4.3 All EU Regulations/Directives and Decisions regarding Financial Control, Management, Publicity, Procurement etc. concerning the disbursement of Structural Funds have been furnished to the Measure Leader for this project. To ensure observance of these policies the Measure Team engaged Helm Consultants to carry out an audit on the Peat Generation project. This assignment involved:

- Selective verification of expenditure declarations underlying claims for EU grant support under the Structural Funds, and
- Checking compliance with EU rules on public procurement and publicity.

6.4.4 As part of the verification, the Consultants reviewed the extent of the developers compliance with the following EU legislation:-

- EU regulation 2064/97 relating to financial control.
- EC Directive 93/38/EEC relating to procurement.
- EC Decision 94/342/EC relating to information and publicity.

6.4.5 The Consultants obtained assurance that the declarations of expenditure and claims submitted for payment of Grant aid were free of material misstatement. Specifically that the expenditure:-

- Is allowable within the definition of the Operational Programme
- Has been incurred by the applicant
- Has been paid for by the applicant
- Is fairly described and classified and is included at the correct amount
- Is in accordance with the applicants books and records
- Has not been subject to a previous application
- The Consultants also ensured that Grant income has been received and can be traced to the applicant's records.

6.4.6 Specifically in accordance with Article 3 of EC Regulation No. 2064/97 (5 % verification) Audit reviewed material items and items whose description aroused the interest of audit were chosen for detailed testing. For each individual item chosen, Audit obtained the following:

- Originating invoice to verify the amount claimed, to ensure the expenditure was eligible and had been appropriately approved.
- Where the invoice had been submitted by the Turnkey contractor, audit sought to ensure that payment had not been made until EPL had received the 'certificate of payment' from their independently appointed site engineers.
- Where the amount claimed related to staff costs audit sought evidence to ensure rates charged were correct and that individual's time was chargeable to the project.
- Extracts from the purchase ledger and nominal ledger to ensure that expenditure had been accounted for correctly.

- The relevant bank statements to ensure that the amount claimed had been paid and where invoices were in other currencies, to ensure that the amount claimed was in fact the Irish Pound cost.

6.4.7 A small number of irregularities were identified in the course of this audit. All of these irregularities were of a once-off type in nature and any amounts identified as being overpaid have been offset against subsequent claims. An Irregularity Report was prepared by the Measure Leader and submitted to the EIOP Secretariat for each irregularity identified.

6.4.8 Arthur Andersen Consultants were employed to verify the Peat Generation control and file systems in place in Peat Division and the Planning Unit of the Department of Public Enterprise. As part of their work, they reviewed the existing control and file system procedures; tested, on a sample basis, the operation of the procedures and assessed the adequacy of the procedures. The consultants reported that the control and file systems in place in respect of the Peat Generation Measures is adequate to ensure verification in line with Article 3.1 (b) of EU Commission Regulation 2064/97.

6.4.9 The Peat Generation Measure was among a number of projects selected for audit, by the European Commissions DG for Financial Control, in the course of an on-the-spot check of the EIOP, during the period 29 May 2000 to 1 June 2000. The purpose of the audit was to establish that the project:

- was properly eligible for grant aid;
- was in accordance with description given in grant applications;
- was being implemented with appropriate technical and financial control in accordance with Community rules and
- had grant claimed in the final beneficiary's own accounts.

6.4.10 In its report to the Department of Finance, the European Commission's auditors had "no particular observations to make" regarding the Peat Fired Project. In essence this amounted to a clean bill of health as far as the specific audit of the Peat Generation Project – the Edenderry Power project - is concerned.

## 6.5 Energy Efficiency Measure

6.5.1 Energy Efficiency underwent a *Control Check* by the Department of Finance ERDF and Cohesion Fund Financial Control Unit; an *Internal Audit* under the National Authority's Annual Audit Plan; and a comprehensive *Verification Check* by Integrated Engineering Consultancy.

6.5.2 *Control Checks*: In May-June 2000, the ERDF & Cohesion Fund Financial Control Unit of the Department of Finance carried out a control check on the EIOP 1994-1999. The scope of the check encompassed the Energy Efficiency Measure.

6.5.3 Arising out of the control check a number of rectifications were made to the financial tables in respect of the Energy Efficiency Measure and these were reflected in the Declaration of Expenditure Table at Appendix F of the 1999 EIOP Annual Report.

6.5.4 At the Auditor's request the Irish Energy Centre carried out a complete review of its method of calculating private expenditure at each grant instalment stage for all Energy Efficiency Investment Support Scheme (EEISS) funded projects and recalculated the private expenditure for all years (based on the actual expenditure incurred at the time of the relevant grant instalment).

6.5.5 During the course of the control check another matter arose in relation to the EEISS. Details of this issue are contained in the EIOP Annual Report 2000. In summary, the ERDF & Cohesion Fund Financial Control Unit raised the question of whether the Irish Energy Centre should have placed a cap on eligible expenditure declared on EEISS projects. The matter was referred to the European Commission, which found in favour of the methodology used by the Centre, i.e. the reporting of the entire project expenditure as eligible expenditure was appropriate. In the light of this, the EIOP Secretariat submitted a rectification report to the European Commission on 5 October 2001, including revised Financial Tables, (the Official Commission Response to the Submission).

6.5.6 *Systems Audits*: The National Authority's Annual Audit Plan for 2001 – drawn up by the Department of Finance (in discussion with the European Commission) in accordance with its obligations arising from Article 3.1(a) of Regulation 2064/97 –

required the carrying out of a systems audit on the Energy Efficiency Measure of the EIOP. Under cascade arrangements, the systems audit work of the Measure fell into two tranches:

- audit of the systems and procedures within the then Department of Public Enterprise that were relevant to the Measure. This work was carried out by the Internal Audit Unit of the then Department of Public Enterprise; and
- audit of the systems and procedures within the Irish Energy Centre that were relevant to the Measure. This work was carried out by Enterprise Ireland (the parent body of the Irish Energy Centre) through the engagement of external consultants (Deloitte & Touche).

6.5.7 The report (dated May 2002) of the systems audit carried out by the Internal Audit Unit of the then Department of Public Enterprise concluded that the systems and controls within the Department for the management of the Measure were appropriate and were applied effectively. No errors or irregularities were discovered in the course of the audit. The report made some recommendations for the improvement of the systems and controls. These recommendations concerned the audit trail and documentation of the system that existed. The Measure Leader fully accepted the recommendations and is implementing them in the context of the 2000-2006 round of Structural Funding.

6.5.8 The report (dated February 2002) of the systems audit carried out by Enterprise Ireland concluded that an effective system of internal control existed within the Irish Energy Centre to ensure protection of EU funds. The report made some recommendations for the improvement of the systems and controls. These recommendations included production of a procedures manual, delegation of authority to staff, a further check to prevent duplication of funding, and the documentation of decisions. All the recommendations were favourably received by the Irish Energy Centre and are being implemented.

6.5.9 *The 5% Verification Check* : In January 2001 the Measure Leader engaged an engineering consultancy, Integrated Engineering Consultancy, to undertake spot-checks on projects, which received funding under the Energy Efficiency Investment Support

Scheme. A total of 37 projects were surveyed. These projects were distributed over 26 companies nation-wide and were selected by the Measure Leader. The total cost of these projects was €15,893,419 which comprises 23% of total Energy Efficiency Measure expenditure of €69,837,503.

6.5.10 The Verification checks main objectives were to determine the following:

1. verify for an adequate number of accounting records the correspondence of those records with the support documentation at the level of final beneficiary
2. confirm for an adequate number of expenditure items, that the nature and timing of the relevant expenditure (commitments and payments) correspond to approved physical characteristics of the project and to the works actually carried out.
3. ensure that the use or intended use of the projects is consistent with the use described in the application for Community co-financing.

6.5.11 A list of the projects inspected is given at **Appendix 9**.

6.5.12 *Conclusions*: The Verification checks concluded that:

- There was good agreement between the total cost of invoices inspected during the site visits with the amounts paid by the various suppliers / contractors for the work undertaken and the total project cost as shown in IEC files.
- In terms of the amount of grant assistance paid under the scheme, no company received a grant payment greater than 40% of the total project cost. (This was outlined in the Application Guidance Package). For companies that received funding under the Large Scale Combined Heat and Power call, the maximum grant paid was €634,869 (£500,000).
- All projects (save one which could not be inspected as it is no longer in use) are operating very satisfactorily and meet the Commission requirements in terms of their intended use.



- Overall the scheme had been very successful in achieving its objectives to promote energy efficiency through the rational use of energy.

## 6.5 Renewable Energy Measure

6.6.1 Renewable Energy underwent a comprehensive *Verification Check* by Irish Management Energy Limited. The Measure did not undergo any other audits or examinations.

6.6.2 *Irregularities*: The administration of the Renewable Energy Measure was conducted in accordance with EC Regulation 1681/94. No irregularities were identified during the period.

6.6.3 *The 5% Verification Check*: Following a tendering process, Irish Energy Management Limited (IEMML), Ballycurreen Commercial Park, Kinsale Road, Cork was appointed to conduct the 5% verification check of the Renewable Energy Measure. The Project Selection for the AER III scheme was as follows: One project from each of the three technology classes supported under the AER III scheme was selected for inclusion in the 5% verification check. The projects selected were:

**Table 6.1: AER Projects**

Technology Class	Company	Project Location	Year completed	EU Grant-aid €	Total Investment €
Biomass	Irish Power Systems	Baleally Co Dublin	1999	268,409.76	1,739,844.21
Wind	MHB Windfarms Limited	Milane Hill Dunmanway Co Cork	2000	475,200	6,603,907.75
Hydro	Hibernian Hydro Ltd.	Meenachallow Glenties Co Donegal	2001	29,792.75	538,368.95

6.6.4 The Project Selection for the Renewable Energy Feasibility Study Grant Scheme was as follows; two projects were selected from the 25 studies supported. These were:

**Table 6.2: REFSG Projects**

<b>Company</b>	<b>Study</b>	<b>Year completed</b>	<b>EU Grant-aid €</b>	<b>Total Investment €</b>
BEOFS, c/o Campile Community, Ballytobin, Callan, Co Kilkenny	Examine the potential of energy self sufficiency and export of surplus electricity over the grid from anaerobic digestion of farm slurry	1999	6094.74 (£4,850)	12,316.46 £9,700)
Cork Corporation Energy Agency Office, City Hall, Cork City	Assess the thermal potential of shallow groundwater in gravels beneath the River Lee floodplain for space heating	1999	6,278.85 (£4,945)	12,557.71 (£9,890)

6.6.5 The verification checks undertaken by IEML concluded that:-

- the financial control and management systems operated by the two implementing bodies (Renewable Energy Division, of the then Department of Public Enterprise and the Irish Energy Centre) contained a good audit trail supporting the application, approval and payments of grants payable in the case of each project selected for review;
- the financial control and management systems underlying the claims by grantees were sound and reliable;
- the expenditure declarations made at the various levels of the control chain at both implementing body and grantee levels were found to be in order;
- appropriate sampling of documents pertaining to grant-aid claims were found to be in order;
- ERDF grant-aid had been committed in line with the grantee's contractual obligations and in accordance with EC Regulations and ERDF eligibility guidelines.

## 6.7 Cutaway Bogs Measure

6.7.1 Cutaway Bogs underwent a comprehensive *Verification Check* by PricewaterhouseCoopers; a second *Verification Check* by Andersen Consulting; an *Internal Audit* under the National Authority's Annual Audit Plan; and a *Systems' Audit* by Andersen Consulting, as part of Andersen's Verification Check.

6.7.2 *The 5% Verification Check*: External consultants, PricewaterhouseCoopers, were engaged to audit on to five of the eight claims for EU grant aid under the Measure, with the remaining three falling within the scope of Andersen's Audit.. Under the terms of Article 3 of the Regulation, the Measure Team is responsible for the implementation of audit procedures designed to:-

- Verify the effectiveness of the management and control procedures in place over grant-aided expenditure; and
- Verify selectively, on the basis of risk analysis, expenditure declarations made at the various levels concerned.

6.7.3 The auditors were required to perform the necessary audit test of Bord na Móna (implementing agency) grant claims in order to enable the Department ensure that it meets the above obligations under the Regulation. Audit reported that the Department of Public Enterprise (the then Lead Department for the Cutaway Bogs Measure) can be assured that all claims submitted for payment by the implementing agency are free from material misstatement.

6.7.4 The Cutaway Bogs Measure was subject to an audit by the Internal Audit Unit of the then Department of Public Enterprise in May 1999. The main aim of the audit was to verify, primarily to the European Commission and also to the Measure Team, that the relevant management and control systems to prevent, detect and correct errors and irregularities are in place and are being applied effectively to all activities related to the Cutaway Bogs Measure.

6.7.5 The audit found that systems and controls for management of the project are appropriate and are being applied effectively within the Measure Team. Audit made a number of recommendations for improving procedures and bring them into line with the new financial control requirements of EU Regulation 2064/97. The Measure

Leader fully accepted the Audit's Recommendations and these have been implemented for the remaining period of the Measure.

6.7.6 Arthur Andersen Consultants were employed to verify the Cutaway Bogs Measure control and file systems in place in Peat Division and the Planning Unit of the Department of Public Enterprise. As part of their work, they reviewed the existing control and file system procedures; tested on a sample basis, the operation of the procedures and assessed the adequacy of the procedures. The consultants reported that the control and file systems in place in respect of the Cutaway Bogs Measure is adequate to ensure verification in line with Article 3.1 (b) of EU Commission Regulation 2064/97.

## 6.8 Rural Networks Measure

6.8.1 Rural Networks underwent two comprehensive *Verification Checks* by KPMG, a *Systems' Audit* by KPMG, a *Control Check* by EU DG Financial Control, and three Internal Audits.

6.8.2 KPMG was engaged on two occasions by the Department to carry out detailed examination of at least 5% of the expenditure of selected ESB claims ranging over the lifespan of the Rural Networks Measure. KPMG reported in May 2000 and August 2002 in respect of both audit exercises and in each case they concurred that the expenditure:

- Was allowable within the definition of the EIOP
- Had been incurred by ESB
- Had been paid for by ESB
- Was fairly described and classified and was included in each claim at the correct amount
- Was in accordance with ESB's books and records
- Had not been subject to a previous application.

Furthermore no matters came to attention of KPMG during either audit to suggest the existence of irregularities as laid out in EU Regulation 1681/94.

6.8.3 KPMG was engaged to verify the Rural Networks control and file systems in place in Electricity (Corporate) Division. As part of their work, KPMG reviewed all the relevant files maintained in the Division to assess the existing control and file system procedures and examined the operation and adequacy of the procedures. KPMG reported in August 2002 that the Division maintained adequate control over the processing of claims and that appropriate documentation supporting the claims has been maintained.

6.8.4 The Rural Networks Measure was among a numbers of projects selected for audit by the European Commission DG for Financial Control in the course of an on-

the-spot check of the EIOP during the period 29 May 2002 to 1 June 2000. The purpose of the audit was to establish that the Measure :

- Was properly eligible for grant aid
- Was in accordance with description given in grant applications
- Was being implemented with appropriate technical and financial control in accordance with Community rules and
- Had grant claimed in the final beneficiary's own accounts.

6.8.5 In its report to the Department of Finance, the European Commission's auditors had "*no particular observations to make*" regarding the Rural Networks measure. In essence this amounted to a clean bill of health as far as the audit of the ESB projects were concerned.

6.8.6 In July 1999 the Internal Audit Unit of the Department reported on its examination of the Rural Networks Measure. Overall, it was found that the management systems and controls in operation for the Measure were adequate to ensure its appropriate and effective implementation. However, on the basis of the audit work, some recommendations were made for improvement of the system e.g. formulate checklists, terms of reference for the external auditors should include a remit to suggest improvements for the areas examined etc.

6.8.7 Internal Audit Unit conducted a follow-up on implementation of their recommendations and reported in May 2001 that it was satisfied that full implementation had been undertaken.

6.8.8 Internal Audit Unit engaged external auditors HELM Corporation to undertake, inter alia, an audit of the Rural Networks Measure. The audit was carried out by HELM in August 2002 and the outcome was satisfactory.

## 6.9 Telecommunications Measure

6.9.1 Telecommunications underwent a comprehensive *Verification Check* by PricewaterhouseCoopers; a second comprehensive *Verification Check*, also by PricewaterhouseCoopers; a third verification check, by Helm Consultants; a *Control Check* by EU DG Financial Control; and an *Internal Audit* under the National Authority's Annual Audit Plan.

6.9.2 The PricewaterhouseCoopers *Verification Check* which verified a sample of claims up to 1997, detected full compliance with the conditions, as set out in the terms of reference.

6.9.3 An on-the-spot check was carried out in May/June 2000 by the EU Commission. (DG Budget). As a result of their findings, it was requested that the designated authority 'carry out a full audit of the projects co-financed by the ERDF.'

6.9.4 The intention was that the second *Verification Check* by PricewaterhouseCoopers would also meet the requirements of a full audit. Despite detecting full compliance as set out in the terms of reference, this verification check was not deemed sufficient to meet the full EU requirements for verification. As a result in October 2002 Helm Consultants were contracted to carry out a comprehensive audit, and the results of this audit confirmed that Eircom expenditure took place in accordance with EU regulations.

6.9.5 Internal Audit carried out an examination of Telecommunication's control systems in 1997, and found the Measure satisfactory in its maintenance of procedures and records.



## 6.10 Postal Measure

6.10.1 The Postal Measure underwent a comprehensive *Verification Check* by KPMG; a second comprehensive *Verification Check* by Chapman Flood Mazars; and a *Control Check* by the Department of Finance ERDF and Cohesion Fund Financial Control Unit.

6.10.2 Under the terms of European Commission Regulation 2064/97, and in accordance with the requirements set out in Department of Finance Circular 23/98, KPMG Chartered Accountants were engaged in 1998 to carry out an audit of the Postal Services Measure covering the period from the commencement of the programme up to 31 December 1997.

6.10.3 A random sample of 6 claims made by An Post (out of a total of 18 made up to 31 December 1997) were selected for audit by KPMG. At least 5% of the expenditure of each claim was subject to detailed examination and, on this basis, KPMG concluded that the expenditure was:

- Allowable within the definition of the EIOP
- Had been incurred by An Post
- Had been paid for by An Post
- Was fairly described and was included in each claim at the correct amount
- Was in accordance with An Post's books and records
- Had not been subject to a previous application

6.10.4 Site inspections were also carried out of the Athlone and Portlaoise Mail Centres which confirmed the existence of the assets in respect of which grant aid had been sought. Photographic evidence of the existence of both these Mail Centres was provided. Photographic evidence of compliance by An Post with the publicity provisions of the European Commission Decision 94/342 was also provided.

6.10.5 KPMG concluded that on the basis of their audit that no matters came to their attention to suggest the existence of irregularities as outlined in EU Regulation

1681/94 and that the 'Nil Returns' submitted by An Post in respect of expenditure under the Measure appeared appropriate.

6.10.6 A further audit of expenditure under the Postal Measure was also carried out by the Internal Audit Unit of the Department of Public Enterprise which brought the level of total expenditure examined up to the 5% required under the Regulations. No irregularities were determined as a result of the internal audit.

6.10.7 The Department of Finance's ERDF and Cohesion Fund Financial Control Unit undertook a separate Control Check during May and June 2000. The check was carried out in accordance with the Dept. of Finance Circular 23/98 and in line with Council Regulation (EEC) 2082/93 and CION Regulation 2064/97. The objectives were to:-

- a. Examine the effectiveness of the management and control systems in place in the organisations
- b. Test the audit trail for selected expenditure by tracing amounts from the ERDF claim back to original documentation.

6.10.8 The Postal Services Measure were examined as part of the check. A Report was produced in August 2000, and the Department prepared a comprehensive response with regard to the implementation of Control Check recommendations.

6.10.9 Counter automation equipment was purchased by An Post from a subsidiary. The profit of IR£248,102 which the subsidiary made in the transaction was ineligible expenditure for co-funding purposes. An Post subsequently submitted a cheque for IR£165,503 (47% of the amounts claimed) which included a reimbursement of IR£116,607.94 in respect of the ineligible expenditure on the Counter Automation Equipment and VAT of IR£104,032 on the transaction which was also ineligible. Irregularity reports on both of these aspects were submitted.

6.10.10 An amount of IR£7,310 was returned as eligible expenditure in 1998 in relation to the Portlaoise Mail Centre. This amount was invoiced to An Post by the ESB and related to on-going electricity usage at Portlaoise which An Post coded to the capital project in error. The error was noted and corrected. An irregularity report was submitted;

6.10.11 An amount of IR£40,000 incurred by An Post on the purchase and subsequent resale of a site not ultimately used for the construction of the Sligo Mail Centre was ineligible expenditure for co-funding purposes. The reason for the resale of the first site was that development costs at a second site purchased by An Post for the construction of the Centre were considerably less. An irregularity report was submitted for IR£18,000 (IR£40,000 @47% aid rate). No refund was required as a grant claim had not been submitted.

6.10.12 Chapman Flood Mazars, Chartered Accountants, have recently been engaged to carry out a verification check of 5% of all expenditure under the Postal Services Measure subsequent to 1997 up to the closure of the programme as well as compliance with all the regulatory requirements and rules.

6.10.13 The Consultants, Chapman Flood Mazars were engaged by the Department to provide independent confirmation of An Post's and the Department's compliance with the requirements of European Commission Regulation No.2064/97, in relation to the Postal Measure, in particular, that verification audits be conducted on at least 5% of the total eligible expenditure. The exercise included an examination of the procedures in place within the Department to ensure that all claims submitted were properly processed through the cascade of the Department and that amounts ultimately claimed from the EU were in agreement with the claims submitted by An Post. The audit covered the period I January 1998 to 31 December 2001. The specific objectives in carrying out the audit were to verify that:

- all amounts claimed represent eligible expenditure under the EU structural funding rules;
- all expenditure is vouchable and verifiable including the physical verification of capital expenditure on a sample basis;
- all expenditure has been incurred and paid within the required time limits;
- all expenditure has been fairly described and recorded at the correct amount;
- all claims are in accordance with the books and records;
- no amounts claimed have been subject to a previous application;
- all expenditure as been incurred on a arms length basis;
- all expenditure statements submitted are free from material misstatement;

- the requirements of the ‘Audit Trail’ document issued by the Department have been adhered to.

6.10.14 The total eligible expenditure under the Postal Services Measure over the period 1998 to 2001 which was covered by the audit amounted to IR£6.443m. The total value of expenditure audited amounted to IR£1.153m. This represented nearly 18% of total eligible expenditure.

6.10.15 Overall the audit concluded that there were no major issues of non – compliance with the Regulations but it did identify ineligible expenditure amounting to IR£56,714 in respect of certain items of expenditure claimed under the programme. The Consultants view is that the errors they identified were not systemic. The items deemed to be ineligible were on the basis that:

- sufficient supporting documentation was not available;
- evidence of payment was not available;
- invoices were addressed to bodies other than An Post.

6.10.16 The Consultants report points out that An Post introduced a new accounting system in 1998 and that sufficient records have not been retained in respect of the old system. Consequently, for some items claimed it was not possible to obtain a supporting invoice or to verify the payment of these amounts by An Post. Where invoices or other supporting documents could not be obtained, the audit was unable to conclusively establish that expenditure constituted a ‘real cost.’ Such expenditure amounted to IR£8,859. Similarly, in instances where payment could not be verified, the audit was unable to establish whether the payments were made within the correct timeframe or that the expenditure was actually and ultimately borne by the project. Under the strict interpretation of the regulations such expenditure may be deemed ineligible. The consultants have indicated that such instances were largely due to the change in the accounting system and that all other evidence suggested that An Post had in fact incurred this expenditure. Their view is that it would be harsh in these circumstances to disallow such expenditure which amounted to IR£46,855.

6.10.17 The Measure Leader has taken the view that the onus for preserving a clear audit trail, irrespective of the changeover to a new accounting system, had been made clear to An Post and if there was not full compliance with the regulations there was no

choice but to rule the expenditure in question as ineligible and to submit Irregularity Reports in respect of each item.

6.10.18 In relation to financial control issues, the Consultants criticised, the absence of a contract or agreement between the Department of Public Enterprise and An Post in respect of the Postal Services Measure. It is their view that such agreements or contracts are essential in case of any disputes or issues in regard to the programme. The Department accepts, in retrospect, this would have been desirable but it was not the practice to draw up such contracts with semi state companies at the time the programme commenced in 1994 nor was it a requirement under the regulations.

6.10.19 The Consultants also pointed out that cumulative totals of claims submitted and payments made were not maintained by the Department which would have helped to ensure that excess grant funding would not be approved in error and that amended claims submitted by An Post were not retained by the Communications Division which potentially could have lead to control problems arising from inaccurate information. Copies of the amended claims in question were held by the Secretariat.

## 6.11 Broadband Infrastructure Project

6.11.1 Broadband underwent a comprehensive *Verification Check* on a claim by claim basis by Ernest and Young. The Measure did not undergo any other examinations or audits.

6.11.2 *Verification and Evaluation:* The technical evaluation of the projects was entrusted by the Measure Team to **North West Labs Ltd**, who furnished a completion report for each phase of each project. Due partly to the difficulties experienced by the industry in the past two years, the level of completion of projects has tended to vary. Most of the projects have been fully completed as provided in the original proposals, but some have been less fortunate. In some cases the project was undertaken by a contractor whose business subsequently failed, and completed by a new company following the takeover of the original contractor. These projects are identified in the table below.

6.11.3 In order to encourage completion of those projects by alternative contractors, the Measure Leader has striven to ensure that each project was completed as closely as feasible to the specification outlined in the original proposals. The underspend on some of the projects can be attributed in the main to those projects having been amended in the light of such difficulties.

6.11.4 *Audits:* Ernst and Young were recruited through a tender process, under which their principal functions were:

To advise the Measure Team of grantee compliance with contractual reporting obligations under the Grant Agreements made with the Department.

To verify the accuracy of the grant claims submitted, and to test that each claim was supported by adequate documentation.

To verify that all contractual obligations have been met under European Commission Regulations and ERDF and Interreg eligibility guidelines.

6.11.5 Ernst and Young have audited each project on a claim-by-claim basis, and as a result have built up a very comprehensive audit of the Broadband Measure.

6.11.6 The sampling involved a full audit from order documentation through to bank statements. The objective was to sample at least the 5% rate stipulated under EU Regulation 2064/97. Sampling included audit of documentation across different key expenditure headings, different time-periods and for expenditures of different scale. The level of sampling of expenditure in some of the projects was between 50% and 60%.

## **6.12: Irregularities**

6.12.1 In an extensive examination of the documentation pertaining to each project, no systemic irregularities were detected. Because of the great diversity in locations and contractors, some minor inconsistencies have been discovered in the completion of some of the Claim Form B documentation. There have also been some minor errors in processing of claims, but where errors occurred they were quickly identified and rectified without delay. In no instance was there any financial shortfall.

6.12.2 In Project No.8, HEAnet Ltd, a typographical error made in the Department resulted in an overpayment of £20,000 on a claim submitted on 7 December 2000. The overpayment was noted, and the overpayment was deducted from the next Form B claim submitted on 21 November 2001.

6.12.3 Claim 2 for Project 12 (Chorus, Thurles), was submitted with an overstated expenditure of £20,794. This was caused when the company incorrectly recorded US Dollar invoices as IR£. Although Ernst & Young highlighted the overclaim and adjusted the figures on Form B, the form was processed here with the original claim amount, and payment of the higher figure was made. The overpayment has been deducted from the final payment for this project.

6.12.4 The first claim submitted by Suir Nore Relays in February 2000. The amount was overstated by £12,807.27 due to the application of an incorrect aid rate. This was identified during a standard documentation check in April 2000. The amount was recovered by means of a deduction from the next claim (in June 2000).

6.12.5 A claim submitted by Princes Holdings (now Chorus) for project ref. DPE 302 was overstated by £39,777 due to a clerical error in the Department. This was identified by external auditors in December 2001. The amount was recovered by means of a deduction from the next claim.

6.12.6 Two projects, No.9 (Chorus, Ennis – Cork) and No.12 (Chorus, Thurles) presented considerable difficulties in respect of final payments. In each case, the project was started by one contractor and taken over and completed by another.

6.12.7 Broadband have had independent verification from Ernst and Young (from the financial aspect) and from NWLabs (from the technical aspect) that the proper procedures were followed, and the final payments for each these two projects were passed for payment.



## 6.13 E-Commerce Measure

6.13.1 E-Commerce underwent a comprehensive *Verification Check* by BCW Consultancy, and an *Internal Audit* under the National Authority's Annual Audit Plan.

6.13.2 BCW found E-Commerce to be in compliance with expenditure as set out in the EU regulations on expenditure.

6.13.3 Internal Audit examined E-Commerce Control Systems in 2002. As part of the management response to the Audit, the E-Commerce Measure Team contracted BCW to comment on the Measure's control systems, and BCW were able to provide independent assurances of the adequacy of the Measure's control systems.

6.13.4 Irregularities: To date six projects under the E-Commerce Measure have incurred irregularities, all of which resulted in grant overpayments. For all irregularities formal irregularity reports have been issued to the EIOP Secretariat. In the case of three of the companies concerned monies have been recovered. In relation to the remaining three projects a recovery process is in operation. It is anticipated that all relevant monies will be recovered in the near future.

## **6.14 Technical Assistance (General) Measure**

6.14.1 The Technical Assistance Project underwent a comprehensive *Verification Check* by Internal Audit. The Technical Assistance Project did not undergo any other audits or examinations.

6.14.2 The minimum 5% verification required under Article 3.1(b) of 2064/97 was carried out by the Internal Audit Unit of the Department of Public Enterprise. Total eligible expenditure for the Measure was £1,035,274.63. Of this, £669,346.20 was examined in the course of the verification check. This represented 64% of Total Eligible Expenditure and covered the full life of the Measure.

6.14.3 In August 2001 the Department, in fulfilling its EU Funding Control Obligations, employed external auditors to carry out a 100% audit of the EBAC.

6.14.4 The audit found that the expenditure claimed was fully compliant with all relevant EU Financial Guidelines

6.14.5 No irregularities were uncovered as part of the audit.

## **6.15 Technical Assistance (IS Awareness) Measure**

6.15.1 The IS Awareness Measure underwent a comprehensive *Verification Check* by BCW Consultancy. The Measure did not undergo any other examinations or audits.

6.15.2 In the Department in fulfilling its EU Funding Control Obligations employed BCW as external Auditors to carry out a 100% Audit of the EBAC.

6.15.3 The Audit found that the expenditure claimed was fully compliant with all relevant EU Financial Guidelines.

6.15.4 No irregularities were uncovered as part of the audit.

# Appendices

# Appendix 1

The texts of the Five Decisions taken by the European Commission in relation the Economic Infrastructure Operational Programme, 1994-1999, are reproduced in this Appendix. The Financial Tables accompanying these Decisions are not re-produced herein, although key dimensions of those Tables are discussed in the course of this Final Report.

**Decision 1: European Commission Decision of 24 July 1994**

**Decision 2: European Commission Decision of 08 July 1997**

**Decision 3: European Commission Decision of 23 July 1998**

**Decision 4: European Commission Decision of 26 July 1999**

**Decision 5: European Commission Decision of 08 July 2000**

**APPENDIX 1 - DECISION 1**

**ERDF No.940409005**  
**Arinco No. 941R16004**

**COMMISSION DECISION of 29/07/1994**

*Concerning the granting of assistance from the European Regional Development Fund (ERDF), to an operational programme for Economic Infrastructure under the Objective 1 Community Support Framework for structural assistance for Ireland*

**THE COMMISSION OF THE EUROPEAN COMMUNITIES,**

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No. 4253/88 of 19 December 1988 laying down provisions for implementing Regulation (EEC) No. 2052/88 as regards co-ordination of activities of the different Structural Funds between themselves and with the operations of the European Investment Bank and the other existing financial instruments<sup>8</sup> as last amended by Regulation (EEC) No. 2082/93<sup>9</sup> and in particular Article 14(3) thereof;

Whereas by Decision C(94)1715 of 13 July 1994<sup>10</sup> the Commission adopted the Objective 1 Community Support Framework for Ireland for the period 1994-1999;

Whereas, pursuant to Article 5(2) of Council Regulation (EEC) No. 2052/88 of 24 June 1988 on the tasks of the Structural Funds and their effectiveness and on co-ordination of their activities between themselves and with the operations of the European Investment Bank and the other

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<sup>8</sup> OJ No. L374 of 31.12.1988, page 1.

<sup>9</sup> OJ No. L193 of 31.07.1993, page 20

<sup>10</sup> To be published.

existing financial instruments<sup>11</sup> as amended by Regulation (EEC) No. 2081/93<sup>12</sup> assistance from the Structural Funds may take the form of part-financing of an operational programme;

Whereas Article 1 of Council Regulation (EEC) No. 4254/88 of 19 December 1988 laying down provisions for implementing Regulation (EEC) No. 2052/88 as regards the European Regional Development Fund<sup>13</sup> as amended by Regulation (EEC) No. 2083/93<sup>14</sup> defines the measures for which the ERDF may provide financial support;

Whereas on 28 April 1994 the Government of Ireland sent the Commission an application concerning an operational programme under Objective 1 in Ireland for which Community assistance was requested from the ERDF and which forms part of the Community Support Framework for Ireland; whereas expenditure under that operational programme is eligible, pursuant to Article 33(2) of Regulation (EEC) No.4253/88, as amended, from 1 January 1994;

Whereas the aims of the operational programme are:

- to contribute to the cost effective supply and consumption of indigenous and imported fuels; and
- to maintain and develop efficient postal and telecommunications services to industry and consumers in general;

and so contribute to the priorities laid down for measures under the Community Support Framework for Ireland;

Whereas certain measures planned under this operational programme include the part-financing of aid schemes which have not been approved by the Commission; whereas the financial commitments should be reduced by the amounts corresponding to the said measures until the aid schemes are approved by the Commission;

Whereas Article 1 of the Financial Regulation of 21 December 1977<sup>15</sup> applicable to the general budget of the European Communities as last amended by Regulation (Euratom, ECSC, EEC) No 610/90<sup>16</sup> states that the legal commitments entered into for measures extending over more than

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<sup>11</sup> OJ No. L185 of 15.07.1988, page 9

<sup>12</sup> OJ No. L193 of 31.07.1993, page 5

<sup>13</sup> OJ No. L374 of 31.12.1988, page 15

<sup>14</sup> OJ No. L193 of 31.07.1993, page 34

<sup>15</sup> OJ No. L356 of 31.12.1977, page 1

<sup>16</sup> OJ No. L70 of 16.03.1990, page 1

one financial year must contain a time limit for implementation which must be specified to the recipient in due form when the aid is granted;

Whereas all the other conditions laid down for the grant of aid from the ERDF have been complied with,

HAS ADOPTED THIS DECISION:

Article 1

The operational programme for Economic Infrastructure for the period 1 January 1994 to 31 December 1999, as described in the annexes and concerning a series of multiannual measures under Priority No.2, Economic Infrastructure, in the Community Support Framework for Ireland is hereby approved.

Article 2

The assistance from the ERDF granted to this programme amounts to a maximum of ECU 108.0 million.

The procedure for granting this financial assistance, including the financial contribution from the Funds to the various subprogrammes and measures which this programme comprises, is set out in the financing plan annexed to this Decision.

Article 3

The budgetary commitment for the first instalment is as follows:

ERDF	ECU 1.6 million
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Commitments of subsequent instalments will be based on the financing plan for the programme and progress in its implementation.

Article 4

The procedure for the grant of the assistance may be amended subsequently, subject to the availability of funds and the budgetary rules, in the light of adjustments decided on in accordance with the procedure laid down in Article 25(5) of Regulation (EEC) No. 4253/88, as amended.

Article 5

This Decision is without prejudice to the Commission's position on the aid schemes in the energy efficiency measure in the programme. In accordance with Articles 92 and 93 of the Treaty, the aid schemes must be approved by the Commission and hence the financial commitments shall be reduced by the amounts corresponding to the said measure (ECU 19.7 million over the period 1994-1999) until the aid schemes are approved by the Commission.



Article 6

The Community aid concerns expenditure on operations under this programme which, in the Member State concerned, are the subject of legally binding commitments and for which the requisite finance has been specifically allocated no later than 31 December 1999. The final date for taking account of expenditure on these measures is 31 December 2000.

Article 7

The Community assistance which is the subject of this Decision is granted in accordance with the detailed implementing provisions which form an integral part of the Community Support Framework.

Article 8

The operational programme shall be implemented in accordance with Community law, and in particular Articles 7, 30, 48, 52 and 59 of the EC Treaty and the Community Directives on the co-ordination of procedures for the award of public contracts.

Article 9

This Decision is addressed to Ireland.

Done at Brussels,

For the Commission

Bruce Millan  
Member of the Commission

## APPENDIX 1 - DECISION 2

ERDF No 940409005  
ARINCO No 941R16004

### COMMISSION DECISION

of 08 -07- 1997

amending Decision C (94) 1971/2 concerning the granting of assistance from the European Regional Development Fund (ERDF) to the operational programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland and confirming several acts of its Monitoring Committee.

### THE COMMISSION ,OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 4253/88 of 19 December 1988 laying down provisions for implementing Regulation (EEC) No 2052/88 as regards coordination of activities of the different Structural Funds between themselves and with the operations of the European Investment Bank and the other existing financial instruments<sup>1</sup>, as last amended by Regulation (EC) No 3193/94<sup>2</sup>, and in particular Article 14(3) and Article 25(5) second and third subparagraph thereof;

Whereas, according to the procedure laid down in Article 25(5) third subparagraph of Regulation (EEC) N° 4253/88, the Commission. may decide, in collaboration with the Member State concerned and after delivery of the opinion of the competent Monitoring Committee, any amendment required for implementing the Operational Programme and, subject to the availability of funds and to the budgetary rules, adjust the financial plan accordingly;

Whereas, according to the procedure laid down in the first and second subparagraph of Article 25 (5) of Regulation (EEC) No 4253/88, the Monitoring Committee is required, if necessary, without altering the total amount of the Community contribution and within harmonised limits for each Objective, to adjust both the procedure for granting assistance as initially approved and, in conformity with available resources and budgetary rules, the financing plan envisaged, including any transfers between Community sources of finance and the consequent adjustments of the rates of assistance; whereas the act of the Monitoring Committee, duly notified to the Commission and the Member State concerned, shall be confirmed by the Commission;

Whereas the competent Monitoring Committee has delivered its opinion;

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<sup>1</sup> OJ No. L374, 31.12.1988, pg 1.

<sup>2</sup> OJ No. L 337, 24.12.1994, p.11

Whereas the Monitoring Committee of the Community support framework has approved on 16 October 1995, an increase of the Community assistance of ECU 1.679 million granted by the ERDF to the Operational Programme for Economic Infrastructure;

Whereas the Monitoring Committee for the Economic Infrastructure Operational Programme at its meeting on 29 March 1996 approved the distribution of ECU 1.679 million of ERDF assistance to the Communications Sub Programme divided equally between the Telecommunications and Postal Measures.

Whereas the Monitoring Committee for the Economic Infrastructure Operational Programme decided at its meeting on 20 March 1997 to modify the total cost of certain annual instalments without altering the total cost of the Community contribution to the Programme to reflect the current state of implementation of the Programme;

Whereas it is appropriate to adjust the financial plan to the current state of implementation of the Operational Programme;

Whereas the Monitoring Committee for the Operational programme for Economic Infrastructure decided by way of written procedure finalised on 21 June 1996 to alter the descriptive text of Paragraph 2.5.1(iii) Page 31 and Paragraph 3.5 (iii) Page 46 of the Programme to provide funding for the generation of electricity from wave energy;

Whereas these acts of the Monitoring Committee for the Economic Infrastructure Operational programme should be confirmed,

HAS ADOPTED THIS DECISION :

Article 1

1. In Article 2 first paragraph, the maximum amount of "ECU 108 Million" is replaced by the maximum amount of "ECU 109,679 Million."
2. The financial plan of the programme annexed to Decision C (94) 1971/2 is replaced by the financial plan annexed to this Decision.
3. The text of Paragraph 2.5.1 (iii) Page 31 and Paragraph 3.5 (iii) Page 46 of the Operational Programme is amended as set out in Annex 1 to this Decision.

Article 2

This Decision is addressed to Ireland.

Done at Brussels, 08-07-1997

## ANNEX 1

### Section 2

Paragraph 2.5.1 (iii) Renewable Energy.

Last sentence of first Sub-Paragraph alter as follows -“Certain other sources, wave energy for example, are being considered in the context of this initiative.

### Section 3

Paragraph 3.5 (iii) Renewable Energy.

Addition to final Sub-Paragraph. Add the following -“ Additional targets for the generation of electricity from wind power, hydro waste and other sources including biomass and wave energy may be set”.

### APPENDIX 1 - DECISION 3

ERDF No 940409005  
ARINCO No 94IR16004

#### COMMISSION DECISION

of 23-07-1998.

amending Decision C (94) 1971/2 concerning the granting of assistance from the European Regional Development Fund (ERDF) to the operational programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland and confirming several acts of its Monitoring Committee.

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 4253/88 of 19 December 1988 laying down provisions for implementing Regulation (EEC) No 2052/88 as regards co-ordination of activities of the different Structural Funds between themselves and with the operations of the European Investment Bank and the other existing financial instruments<sup>1</sup>, as last amended by Regulation (EC) No 3193/94<sup>2</sup>, and in particular Article 14(3) and Article 25(5) second and third subparagraphs thereof;

Whereas the Commission has adopted, by Decision C 1971/2 of 29 July 1994, as amended by Decision C (97) 1945 of 8 July 1997, the Operational Programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland;

Whereas the Monitoring Committee of the Community support framework has approved on 6 June 1996, an increase of the Community assistance of ECU 0.843 million granted by the ERDF to the Operational Programme for Economic Infrastructure;

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<sup>1</sup> OJ No L 374, 31.12.1988, p. 1.

<sup>2</sup> OJ No L 337, 24.12.1994, p. 11.

Whereas the Monitoring Committee for the Economic Infrastructure Operational Programme at its meeting on 29 September 1997 approved the distribution of ECU 0.842251 million of ERDF assistance to the Rural Networks Measure of the Energy Sub-Programme;

Whereas in accordance with paragraph 4.1.2 of the Implementation provisions of the Community Support Framework a mid-term review has been carried out on the Community Support framework for Objective 1 in Ireland;

Whereas, according to the procedure laid down in Article 25(5) third subparagraph of Regulation (EEC) N° 4253/88, the Commission may decide, in collaboration with the Member State concerned and after delivery of the opinion of the competent Monitoring Committee, any amendment required for implementing the Operational Programme and, subject to the availability of funds and to the budgetary rules, adjust the financial plan accordingly;

Whereas the CSF Monitoring Committee at its meeting of 29 July 1997 has approved the Mid Term Review of the Community Support Framework for Objective 1 in Ireland and transferred €2 million of Community assistance from the Economic Infrastructure Programme to other operational programmes within the CSF for Objective 1 in Ireland and reallocated €10 million from the Telecommunications Measure to a new Measure entitled Information Society - Broadband Technology within the Economic Infrastructure Programme;

Whereas, according to the procedure laid down in the first and second paragraphs of Article 25(5) of Regulation (EEC) No 4253/88, the Monitoring Committee is required, if necessary, without altering the total amount of the Community contribution and within harmonised limits for each Objective, to adjust both the procedure for granting assistance as initially approved and, in conformity with available resources and budgetary rules, the financing plan envisaged, including any transfers between Community sources of finance and the consequent adjustments of the rates of assistance; whereas the act of the Monitoring Committee, duly notified to the Commission and the Member State concerned, shall be confirmed by the Commission;

Whereas the Monitoring Committee for the Economic Infrastructure Operational Programme decided at its meeting on 29 September 1997 to modify the total cost of certain annual instalments without altering the total cost of the Community contribution to the Programme to reflect the current state of implementation of the Programme;

Whereas these acts of the Monitoring Committee for the Economic Infrastructure Operational programme should be confirmed,

HAS ADOPTED THIS DECISION :

#### Article 1

Decision C (94) 1971/2 is amended as follows:

1. In Article 2 first paragraph, the maximum amount of “ECU 109.679 Million” is replaced by the maximum amount of “ECU 108.521251 Million”.
2. The financial plan of the programme is replaced by the financial plan annexed to this Decision.
3. The text of the Operational Programme is amended at Page 59 by the addition of the text set out in Annex 1 to this Decision.

#### Article 2

This Decision is addressed to Ireland.

Done at Brussels, 23-07-1998

For the Commission  
Monika WUF-MATHIES  
Member of the Commission

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#### **Annex I.**

Section 3- Objectives and Strategy of Sub Programmes.

Paragraph 3.6- After 3.6 (ii) which deals with Telecommunications on page 59 insert new measure.

(iii) Information Society -Broadband Technology with the following text:

#### **3.6 Communications Sub-Programme Measures**

##### ***(iii) Information Society -Broadband Technology***

#### **Context**

In the context of the mid-term review of Operational Programmes and Community Initiatives in the current CSF and in the light of policy developments at European Community level, one of the priorities selected for funding was the development of the Information Society. The CSF Monitoring Committee at its meeting on 29 July 1997 approved the reallocation of €10 million ERDF aid from savings within the Telecommunications Measure of the Economic Infrastructure

Operational Programme to fund a new measure for broadband telecommunications to assist the development of the Information Society in Ireland.

### **Rationale and Objectives**

The infrastructural challenge posed by the Information Society is the development of a high capacity national network which can support the mass market availability of emerging advanced services, incorporating the simultaneous transmission of data, text, sound, images and video. The total investment which must ultimately be dedicated to this end will be a matter for operators in the market.

The liberalisation of telecommunications infrastructure from 1 July 1997 enables operators other than Telecom Eireann to participate in infrastructural development. The liberalisation process in the telecommunications sector which will be completed in 1 January 2000 is expected to engender vigorous competition in the provision of traditional telecommunications, notably voice traffic. The provision of EU aid is conditional on all the operators, which includes the private sector, being allowed to participate in tendering for the grant on the basis of criteria set down in advance.

In short, the primary objective of the Information Society Measure is therefore to provide a stimulus to investment in broadband infrastructure to support the Information Society in Ireland.

<b>FINANCIAL SUMMARY</b>		
<b>GROSS INVESTMENT/ERDF AID PROFILE</b>		
For Information Society Measure		
(€ million)		
Year	Total Expenditure	ERDF Aid
1998	8.0	4.0
1999	12.0	6.0

*Responsible Authority:*

Department of Public Enterprise

*Duration:* 1998/1999

*Financial Beneficiaries:*

Providers of Telecommunications Infrastructure

*Scope/Geographical Coverage:* Nationwide

Indicators for Monitoring and Evaluation



<i>Indicator:</i>	1999 Forecast
Geographical Coverage	To be determined

**APPENDIX 1 – DECISION 4**

ERDF: 94.04.09.005

ARINCO: 94.IR.16.004 C(1999) 3779

COMMISSION DECISION

of 26 -11- 1999

amending Decision C(94) 1971/2 concerning the granting of assistance from the European Regional Development Fund (ERDF) to an Operational Programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland and confirming several acts of its Monitoring Committee.

**THE COMMISSION OF THE EUROPEAN COMMUNITIES,**

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No, 4253/88 of 19 December 1988 laying down provisions for implementing Regulation (EEC) No. 2052/88 as regards co-ordination of activities of the different Structural Funds between themselves and with the operations of the European Investment Bank and the other existing financial instruments<sup>1</sup>, as last amended by Regulation (EC) No.3193/94<sup>2</sup>, and in particular Article 14(3) and Article 25(5) second and third, subparagraphs thereof;

Whereas the Commission has adopted, by Decision C 1971/2 of 29 July 1994, as amended by Decision C (1998) 2115 of 23 July 1998, the Operational Programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland;

Whereas the Monitoring Committee of the Community support framework has approved on 29 July 1997, on 25 June 1998, and on 18 November 1998 an increase of the Community assistance

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<sup>1</sup> OJ No L 374, 31.12.1988, p. 1.

<sup>2</sup> OJ No L 337, 24.12.1994,p.11.

of 634,000 euro, 1,479,000 euro, and 654,000 euro respectively granted by the ERDF to the Operational Programme for Economic Infrastructure;

Whereas the Monitoring Committee for the Economic Infrastructure Operational Programme at its meetings on 30 March 1998, on 28 September 1998, and on 29 March 1999 approved the distribution of 634,000 euro, 1,479,000 euro and 654,000 euro of ERDF assistance to various Measures of the Programme;

Whereas, according to the procedure laid down in Article 25(5) third subparagraph of Regulation (EEC) No. 4253/88, the Commission may decide, in collaboration with the Member State concerned and after delivery of the opinion of the competent Monitoring Committee, any amendment required for implementing the Operational Programme and, subject to the availability of funds and to the budgetary rules, adjust the financial plan accordingly;

Whereas the Monitoring Committee for the Programme at its meeting of 29 March 1999 reallocated 250,500 euro from the Technical Measure to a new Measure entitled Information Society (Business Awareness) and approved a textual change to the Cutaway Bogs Measure within the Economic Infrastructure Programme;

Whereas the Monitoring Committee for the Programme at its meeting on 29 March 1999 approved the extension of the final date for taking account of expenditure to 31 December 2001;

Whereas, according to the procedure laid down in the first and second paragraphs of Article 25(5) of Regulation (EEC) No. 4253/88, the Monitoring Committee is required, if necessary, without altering the total amount of the Community contribution and within harmonised limits for each Objective, to adjust both the procedure for granting assistance as initially approved and, in conformity with available resources and budgetary rules, the financing plan envisaged, including any transfers between Community sources of finance and the consequent adjustments of the rates of assistance; whereas the act of the Monitoring Committee, duly notified to the Commission and the Member State concerned, shall be confirmed by the Commission;

Whereas the Monitoring Committee for the Economic Infrastructure Operational Programme decided at its meeting on 30 March 1999 to modify the total cost of certain annual instalments without altering the total cost of the Community contribution to the Programme to reflect the current state of implementation of the Programme;

Whereas these acts of the Monitoring Committee for the Economic Infrastructure Operational programme should be confirmed,

Whereas Article 2(1) of Council Regulation (EC) No. 1103/97 of 17 June 1997 on certain provisions relating to the introduction of the euro<sup>1</sup> provides for the replacement, as from 1 January 1999, of every reference to the ECU in a legal instrument by a reference to the euro at a rate of one euro to one ECU ;

HAS ADOPTED THIS DECISION :

#### Article 1

Decision C (94) 1971/2 is amended as follows:

1. In Article 2 first paragraph, the maximum amount of “ECU 108.521251 Million” is replaced by the Maximum amount of “111 288 251 euro”.
2. The financial plan of the programme is replaced by the financial plan annexed to this Decision.
3. The text of the Operational Programme is amended at pages 50 and 60 by the addition of the texts set out in Annexes 1 and 2 respectively to this Decision.
4. In Article 6 the date of “31 December 2000” in the final sentence is replaced by the date “31 December 2001”

#### Article 2

This Decision is addressed to Ireland.

Done at Brussels, 26 -11- 1999

For the Commission  
M.BARNIER.  
Member of the Commission

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### **RATIONAL FOR INFORMATION SOCIETY (BUSINESS AWARENESS) MEASURE**

Global electronic commerce will be an engine of economic growth in the 21st century, with the potential to invigorate economies by enhancing productivity; streamlining distribution, and revamping corporate structures.

As electronic commerce begins to displace traditional trading mechanisms, it is vitally important that small and medium enterprises in Ireland recognise the threats and opportunities associated with the new information technologies so that they can compete effectively in an increasing global and competitive trading environment. Irish enterprises must adopt and use these technologies if they are to participate successfully in the Information Age.

While many small and medium enterprises are aware of the existence of the new technologies, surveys have revealed that few respondents claim a strong degree of familiarity. A business

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<sup>1</sup> OJ No L 162, 19.6.1997 p. 1.  
26 March 2003

education and awareness campaign will be undertaken to “demystify” these technologies and to encourage small and medium enterprises in Ireland to apply information and communications technologies to their operational, procurement and marketing functions. Such a campaign will be focused on particular sectors which offer a potential demonstration effect.

***Responsible Authorities***

Department of Public Enterprise, Information Society Commission and Irish Business and Employers Confederation. .

***Final Beneficiaries***

Small and Medium Enterprises.

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**Annex 1**

**INFORMATION SOCIETY (BUSINESS AWARENESS) MEASURE**

**Actions:**

*The Cutaway Peatlands Measure will:*

*Provide for studies on the various ecological processes that are taking place in the new wetlands. The studies will included such diverse matters as the hydrology of the areas, the factors favouring the colonisation by differing plant communities and the use of indicator species to measure water purity. The information gleaned will supplement the existing level of knowledge regarding the rehabilitation of cutaway bogs to form wetlands.*

*Allow for on-site development that will lead to the creation at a minimum of an additional 1,000 acres (400 ha.) of new wetlands and notably the addition of deeper water bodies through excavation of residual peat and subsoils, which can be used as angling lakes. Public usage is being facilitated by the development of access roads, fishing stands, pathways, information panels and the strategic location of bird hides.*

**Scope/Geographic coverage**

The measure consists of studies and on-site developments in areas of greatest cutaway development potential. The bulk of the work will be undertaken in the Midlands and there will also be some work undertaken in Co. Mayo and Co. Tipperary.

## Responsible Authorities

Department of Public Enterprise and Bord na Mona

## Final Beneficiaries

Bord na Mona

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## Annex 2

### **INFORMATION SOCIETY (BUSINESS AWARENESS) MEASURE**

#### Section 3 -Objectives and Strategy of Sub Programmes

Paragraph 3.7 - After 3.7 which deals with the Technical Assistance Programme on page 60 insert new measure.

- (I) “ *Information Society (Business and Awareness) Measure*”, with the following text

#### Context

In the context of the mid-term review of Operational Programmes and Community Initiatives in the current CSF and in the light of policy developments at European Community level, one of the priorities selected for funding was the development of the Information Society. In this context, the Economic Infrastructure OP at its meeting on 29 March 1999 approved a proposal for a new measure on Information Society within the Technical Assistance Sub-Programme to separately identify the measure rather than positioning it within the Technical Assistance Measure of the Technical Assistance Sub-Programme. The Monitoring Committee approved the underlying rationale for co-financing the campaign to be implemented by IBEC, and the Information Society Commission as set out in the text in the attached Appendix. In short, ‘the Monitoring Committee:

- i) approved the underlying rationale for the awareness campaign as set out in the Appendix.
- ii) approved the establishment of a new measure within the Technical Assistance Sub-Programme entitled Information Society (Business and Awareness) Measure, and
- iii) approved the transfer of aid of £197,250 from Technical Assistance Measure to the new measure.

## APPENDIX 1 – DECISION 5

ERDF No. 940409005  
ARINCO No. 94IR16004

### COMMISSION DECISION

of 08-06-2000

amending Decision C (94) 1971/2 concerning the granting of assistance from the European Regional Development Fund (ERDF) to the operational programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland and confirming several acts of its Monitoring Committee.

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No. 4253/88 of 19 December 1988 laying down provisions for implementing Regulation (EEC) No. 2052/88 as regards co-ordination of activities of the different Structural Funds between themselves and with the operations of the European Investment Bank and the other existing financial instruments<sup>1</sup>, as last amended by Regulation (EC) No. 3193/94<sup>2</sup>, and in particular Article 14(3) and Article 25(5) second subparagraph thereof;

Whereas the Commission has adopted, by Decision C 1971/2 of 29 July 1994, as amended by Decision C (1999) 3779 of 26 October 1999, the Operational Programme for Economic Infrastructure within the Community support framework for structural assistance under Objective 1 in Ireland;

Whereas the Monitoring Committee of the Community support framework has approved by written procedure ending on 2 July 1999 the inclusion of an Electronic Commerce Infrastructure Measure under the Communications Sub-Programme and the re-allocation of 2.5 million euro to this measure from the Broadband Technology measure within the same Sub-Programme;

Whereas it approved at its meeting on 11 October 1999 and subsequently by written procedures ending on 28 October 1999, 16 November 1999 and 8 December 1999 the re-profiling of the expenditure in 1999 and the redistribution of funding from the Energy Sub-Programme to the Communications Sub-Programme of 2.456500 million euro and from Technical Assistance Sub Programme to the Communication Sub-programme of 0.419312 million euro;

Whereas according to the procedure laid down in the first and second paragraphs of Article 25(5) of Regulation (EEC) No. 4253/88, the Monitoring Committee is required, if necessary, without altering the total amount of the Community contribution and within harmonised limits for each Objective, to adjust both the procedure for granting assistance as initially approved and, in conformity with available resources and budgetary rules, the financing plan envisaged, including any transfers between Community sources of finance and consequent adjustments of the rates of

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<sup>1</sup> OJ No L 374, 31.12.1988, p.1.

<sup>2</sup> OJ No L 337, 24.12.1994, p. 11.

assistance; whereas the act of the Monitoring Committee, duly notified to the Commission and the Member State concerned, shall be confirmed by the Commission;

Whereas these acts of the Monitoring Committee for the Economic Infrastructure Operational programme should be confirmed,

Whereas Article 2(1) of Council Regulation (EC) No. 1103/97 of 17 June 1997 on certain provisions relating to the introduction of the euro<sup>1</sup> provides for the replacement, as from 1 January 1999, of every reference to the ECU in a legal instrument by a reference to the euro at a rate of one euro to one ECU;

HAS ADOPTED THIS DECISION

#### Article 1

Decision C (94) 1971/2 is amended as follows:

1. The financial plan of the programme is replaced by the financial plan annexed to this Decision.
2. The text of the Operational Programme is amended at page 59 by the addition of the text set out in Annex 1 to this Decision.

#### Article 2

This Decision is addressed to Ireland

Done at Brussels, 08-06-2000

For the Commission

M. BARNIER  
Member of the Commission

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#### **Annex 1**

Section 3 – Objectives and Strategy of Sub Programmes.

Paragraph 3.6 – After 3.6 (iii), which deals with Broadband Technology on page 59 insert new measure.

(iv) E-Commerce Infrastructure Measure with the following text:

#### **3.6 Communications Sub-Programme Measures**

*(iv) E-Commerce Infrastructure*

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<sup>1</sup> OJ No 162, 19.6.1997 p.1.  
26 March 2003



## **Rationale**

The Information and telecommunications technology sector has changed considerably since the inception of the EIOP, in 1994. While the EIOP will result in significant improvements in broadband and general telecommunications infrastructure in Ireland, the global telecommunications market is embarking on a new phase of development due to the exponential growth of the Internet, the trend towards technology convergence, the uptake of e-commerce and the emergence of the information society.

For this reason, a revised measure is proposed for the Communications Sub-Programme to address Ireland's e-commerce and information society infrastructural gaps. This infrastructure emphasises the development of applications, tools and learning experiences through practical demonstrations of the capabilities of e-commerce in the emerging information society.

Communications services in Ireland must be competitive with those available elsewhere. The gaps and deficits in the e-commerce infrastructure are inhibiting economic growth. They are also preventing economic performance in this sphere from converging with that of other European countries, by reducing the ability of indigenous industry to compete in international markets.

A focal point of this measure is the development of an expertise and infrastructure, which will facilitate the uptake of e-commerce as a business process by Irish industry. Building an e-commerce environment of systems, infrastructures and know-how by users, will greatly improve the ability of SMEs, in particular, to compete internationally.

## **Objectives**

The objective of this measure of the Communications Sub-Programme is:

To support cost-effective e-commerce infrastructure by providing assistance of not more than 40% of eligible capital cost for selected projects.

This objective will be achieved through a selective investment strategy with the following key actions

- (i) Support the e-commerce conversion and enabling of elements through the entire business process value chain such as:
  - Raw materials ordering and procurement
  - Assembly and manufacturing process control systems
  - Support systems and development and roll out and
  - Marketing, sales and distribution

The projects will be benchmarked against best international practice in these fields, in particular with respect to Total Quality Management, Just in Time systems, etc.

- (ii) In implementing the projects at (i) beneficiaries of the measure must create an infrastructure of virtual business communities of common interest by:

- Sharing knowledge and information gained through the practical use of e-commerce tools and processes;
- Enabling SMEs to undergo e-commerce conversion by locating and linking up with other companies to their mutual benefit,
- Establishing a mentoring structure in which beneficiaries shall each foster several SMEs providing them with the results of their projects, advising them on how to transform their businesses to support e-commerce capability.

Financial Summary:

Year 1999:	Total expenditure:	7 million euro
	ERDF aid:	2.5 million euro

# Appendix 2

## Membership of the Monitoring Committee of Economic Infrastructure Operational Programme

**Chair** Mr. Martin Brennan, Assistant Secretary, Department of Communications, Marine and Natural Resources, is currently Chairman of the Committee. He succeeded Mr. Tom Reeves, then Assistant Secretary, Department of Public Enterprise on 29<sup>th</sup> March 1999

**Secretary** Department of Public Enterprise

### **Government Departments**

Department of Finance  
Department of Communications, Marine and Natural Resources

### **European Commission**

DG Regio  
DG Energy & Transport

### **Agencies**

An Post  
Bord na Mona  
ESB  
Eircom  
Irish Energy Centre

### **Social Partners**

IBEC  
ICTU  
Regional Authorities

### **Other Bodies**

CSF Information Unit  
CSF Evaluation Unit

### **External Evaluator**

Indecon Economic Consultants

## **Appendix 3**

The adjustments to the amounts of EU Funds for the EIOP, arising from the Monitoring Committee's Decisions, are set-out in the following excel table "EIOP Additions and Re-allocations".

**APPENDIX 4 : REPORT TO CSF MONITORING COMMITTEE REGARDING  
ECONOMIC INFRASTRUCTURE OPERATIONAL PROGRAMME**

**22nd May 1997**

1. **BACKGROUND:** This paper represents the considered views of the EIOP Monitoring Committee on the midterm evaluation of the Economic Infrastructure Operational Programme. The mid-term evaluation was undertaken by Indecon Economic Consultants. The Consultant's Report was considered by the Monitoring Committee at its meeting on 20th March 1997 where it was agreed that the Committee would only comment on major issues raised in the mid-term evaluator's report and other significant issues raised during the course of that meeting.

2. The External Evaluator raised significant issues in relation to four measures of the Operational Programme (3 Measures from the Energy Sub-Programme and 1 Measure from the Communications Sub-Programme). Each of the issues raised by the consultants and other related issues raised by the Monitoring Committee are dealt with in the following paragraphs.

**ENERGY SUB.PROGRAMME**

*3 Peat Generation Measure (ERDF aid = €26 million)*

3.1 External Evaluator's comments: The External Evaluator's comments and conclusions on the Peat Generation measure included the following:

- delays have arisen on the organisation of the competition for the new station;
- the timescale for the plant and whether it will be possible to drawdown the ERDF funds for the measure.

3.2 **Timeframe Concerns:** Discussions took place on 13th February 1997 between the Minister for Transport, Energy and Communications and the EU Commissioner for Regional Policy, when the availability of EU financial support for the project was confirmed in the light of an undertaking by the Minister to demonstrate - with the support of independent advice - that the peat station could be completed by end 2001 and thus enable the entire ERDF grant to be drawn down. On 23 April 1997 the Minister provided the Commissioner with a report on the timeframe from the independent Consultants who are running the Peat Station Competition. The Consultants have advised that there is a high probability that the project will be completed in a 54 month timeframe, i.e. completion by July 2001.

3.3 **Consultant's Report on Time Schedule:** The Competition process started in February 1997. Progress is sound to date. Prequalification is currently in progress and on schedule and it is planned to invite detailed bids in June. The Consultants have identified the following, as two of the most critical factors in optimising the project schedule:

- the efficient preparation by the Developer of the Integrated Pollution Control ("IPC") Licence application and efficient processing of the application by the EPA, and

- the efficient preparation by the Developer of the Planning Application and a positive approach and efficient processing of the application by the Planning Authority.

In relation to IPC Licensing, the independent consultants have carried out additional work on the IPC licensing requirements. This work included a meeting with the EPA. As a result, the following measures are being implemented to assist efficient IPC licensing:

- Comprehensive guidance on IPC licensing will be provided to bidders by the independent consultants in the competition documentation. Preparation of this material is underway.
- The Developer will be encouraged to engage in prior consultation with the EPA in parallel with the preparation of an Environmental Impact Statement. The EPA has undertaken to co-operate positively in this consultation.
- Provided that the IPC licence application is properly prepared, the EPA has undertaken to expedite the processing of the application and any, third party submissions. The EPA has pointed out that in some significant previous cases, it has processed applications in less than the statutory period.

Based on the above, the Consultants consider that 12 months is both practicable and achievable for the completion of the IPC Licensing process. In relation to the planning permission, the independent consultants have also carried out additional work on the process for planning permission. This work has included consultation with the Offaly Local Authority. The following measures and characteristics are expected to assist the timely granting of planning permission:

- Comprehensive guidance will be provided to bidders by the independent consultants on the planning permission process in the competition documentation. The County Council has undertaken to review this information to check that the requirements are accurately reflected.
- The Developer will be encouraged to engage in prior consultation on planning matters. The County Council has agreed to make itself available and will participate positively in such prior consultation.
- The Council has reported that there is substantial local support for the Project and it is included in the local County Development Plan.
- Provided that the planning application is properly prepared, the County Council has undertaken to expedite processing of the application.

Based on the above, the Consultants consider that 12 months is both **practicable and achievable** for the completion of the planning permission process, including a contingency for the submission of supplementary information by the Developer. Should the matter be referred to An Bord Pleanála it is most probable that the period required to obtain planning permission would not exceed 16 months. Based on the reported high level of local support for the project, any objections would most probably originate from interest groups outside the project area and are judged unlikely to succeed.

Bord na Mona has acquired a suitable site which will be available to bidders on commercial terms. The site is well located with respect to the peat reserves. Preparatory site investigations already completed include a Baseline Environmental Survey, a Geotechnical Report and a Water Resources Survey. This preparatory work should assist the planning and environmental consent processes.

3.4 **Achievable Project Schedule:** The Monitoring Committee notes that based on the additional investigations carried out by the independent consultants and the initiatives mentioned above, it is considered that there is a high probability that the project can be completed in an elapsed time of 54 months from the start of the competition process. This would provide project completion in July 2001. This schedule is considered to be practicable and achievable by the Monitoring Committee. The remaining months to the end of 2001 could be considered as a **contingency available to** deal with unforeseen delays, such as third party objections in the planning process.

For reference, the 54 month schedule consists of the following main components:

Competition	12 months
Planning/environmental consents and financial close	12
*Lump sum turnkey contract implementation	30

\*140 mw Peat Plant at Oslo in Finland recently completed in under 3 years.

The Monitoring Committee notes that the Department of Transport, Energy and Communications has also met with the EPA and the Local Authority. The EPA are satisfied that the application will be dealt with within a six month timeframe. The Local Authority is strongly supportive of the project. They expect that the planning application will not be contentious, particularly as it is in an area with a strong tradition of electricity generation and where there is almost 100% support for the project.

3.5 **Employment Implications:** The benefits associated with this project derive largely from the significant local employment, particular in peat extraction. The project will create about 1120 man Years in the development phase - 700 in the construction of the plant and 420 in the bog development and milled peat stock - building programme. Thereafter, over the lifetime of the plant, 250 permanent and 250 seasonal jobs will be provided in the peat production and transportation operations. The measure has the highest job creation profile in the entire E1OP.

**MONITORING COMMITTEE'S VIEW ON THE PEAT GENERATION MEASURE** The Monitoring Committee welcomes the independent study on the timescale for the delivery of the new peat fired station, which demonstrates that the project can be completed by July 2001, thus allowing the available ERDF aid for the measure to be drawdown. The Monitoring Committee recommends that the EU Commission give maximum flexibility on the timescale for the plant and agrees that the Commission should extend the date for commitments and expenditure to end 2000 and end 2001, respectively

The Monitoring Committee recommends that the peat project should remain an intrinsic part of the Operational Programme particularly in view of the extensive job-creation impact of the project in terms of direct labour during construction of the plant, but more importantly in the operation of the plant. The Monitoring Committee notes that the benefits associated with the plant derive largely from the significant local employment, particularly in peat extraction. It is noted that Bord na Mona has already spent over £2.5 million in bog development during 1996 with a further £4.8 million in the current year. The Monitoring Committee will carefully monitor the progress of the project on an on-going basis.

4.1 **External Evaluator's comments:** The principal issues raised by External Evaluator in relation to the Energy Efficiency Measure included the following:-

- there has been a significant degree of underspend under the measure
- there was a low interest in the Energy Audits Grants Scheme in the early stages and the scheme should be discontinued for new applicants after June 1997;
- the Energy Efficiency Investment Support Scheme should be continued with a refocusing to minimise potential deadweight and to be more selective in terms of the projects to be funded;
- the extent of expenditure on the advice, information and support element of the measure should not exceed 50% of the measure funding and some reallocation of the funds from the measure should be considered; and
- concerns about the relevance of some of the indicators and consideration should be given to revision of some of the targets for energy savings.

In addition, the European Commission consider that the measure should be specifically focused at the traded sectors of the economy in order to improve industrial competitiveness.

4.2 **Underspending within the measure:** Underspending under the measure is attributable to number of factors. Among them, the belated approval of the Operational Programme (September 1994) and the delay in issuing approval of various energy efficiency measures from a state-aids' perspective (December 1994). Additionally, the Irish Energy Centre, the primary vehicle for delivering the various energy efficiency measures was not formally established until January 1995. The Department and Centre's senior personnel were concerned primarily with putting the requisite institutional, structural, budgetary and personnel resources in place, and with finalising the individual schemes to be funded from the measure. Because of this, expenditure was lower than planned in the period up to end 1996. This was compounded by the nature of the grant schemes under the measure and a longer than anticipated lead in time which had been required to sensitise Irish industry to the value of energy efficiency.

4.3 **Discontinuance of the Energy Audits Grant Scheme:** The Monitoring Committee has agreed that the Energy Audits Grant Scheme should be discontinued with effect from 31 October 1997 as opposed to 30th June as recommended by the External Evaluator. The resultant savings are to be used to support the Self-Audit

4.4 **Potential deadweight and the need to have a more selective approach in relation to the Energy Efficiency Investment Support Scheme:** Investment decisions taken under the EEISS are always with a view to stimulating replication under market conditions. Having regard to the low level of activity in energy auditing and energy efficiency investment in the time preceding the Operational Programme deadweight is not considered to be a serious issue. The Irish Energy Centre is sensitive to both deadweight and the need to be selective in the nature of the projects to be funded under the measure. The measure is focused towards the traded sectors of the economy.

4.5 **Extent of expenditure on the advice, information and support elements of the measure should not exceed 50% of the measure funding:** The Monitoring Committee has agreed to reduce the extent of ERD17 aid for the advice, back-up and promotional activities under the measure by €2.54 million. At the behest of the Commission, the Monitoring Committee has identified a range of specific energy projects to absorb the ERD17 resources being "surrendered" from within the measure. The CSF Monitoring Committee is asked to approve a range of projects in the energy area to absorb these "spare" funds in page 10.



**Concerns about relevance of indicators for the measure** The Monitoring Committee notes the External Evaluator's comments that the indicators for the Energy Efficiency Measure are useful measures of activity and impact. Of particular importance is the potential for energy savings identified of £125 million and more importantly the energy savings target of £50 million. The Evaluator expressed some concern over whether it will be possible to meet the energy savings target and concluded that it is unlikely to be feasible to exceed a target of £40 million over the period of the Operational Programme. The Monitoring Committee, for its part, has decided that a target, of £40 million energy savings, over the life of the Programme, is a more realistic target, particularly having regard to the proposed reduction in the EU aid for the Energy Efficiency Measure.

#### **MONITORING COMMITTEE'S VIEW ON THE ENERGY EFFICIENCY MEASURE**

The Monitoring Committee has already agreed that the Energy Audits Grant Scheme should be discontinued from 31 October 1997 and that the resultant savings should be refocused to support the Self-Audit Scheme. The CSF Monitoring Committee is asked to endorse this decision.

The Monitoring Committee has agreed that the ERDF provision for the advice, back-up and promotional aspects of the measure should be reduced by €2.54 million aid. At the request of the European Commission, the Monitoring Committee has identified a range of additional energy related projects to absorb this provision. (Details contained in page 10). The Monitoring Committee recognises that there has been underspending in the Energy Efficiency Measure under the Energy Efficiency Investment Support Scheme. However, the rate of take up of the scheme has improved and all of the ERDF funds for the EEISS will be spent.

The Committee does not share the Evaluator's concerns about deadweight. Investment decisions taken under the EEISS are always with a view to stimulating replication under market conditions. Having regard to the low level of activity in energy auditing and energy efficiency investment in the time preceding the Operation Programme deadweight and the need to be selective in the nature of the projects to be funded under the measure. The Committee agrees with the Evaluator that energy efficiency is, in practice, the result of a combination of technology and behaviour and to realise the energy efficiency improvement potential that exists in Ireland it is necessary to effect change both in technology and behaviour. It is a legitimate function of public policy to promote rational energy use such that the dissemination of energy efficiency technologies is replicated and becomes part of Ireland's competitive base. The Committee considers that the indicator for the realisation of energy savings should be £40 million. The Monitoring Committee recommends that this revised target should relate to cumulative energy savings up to end 1999. The CSF Monitoring Committee is asked to endorse the revised target for the measure.

#### 5 *Renewable Energy, Measure (ERDF aid = €18.6 million)*

5.1 **External Evaluator's comments:** The External Evaluator's most significant comments and conclusions on the Renewable Energy Measure included the following:-

- there has not been any spending under the measure yet;
- the measure is based 'on environmental rationale, rather than economic rationale;

- alternative energy may not be justified on commercial grounds, but wider externalities may justify specific policy interventions such as those included in the Operational Programme;
- an assessment of the costs and benefits of specific technologies (and of specific major investments) should be undertaken and the methodology for such assessments should be in accordance with best practice; the rationale for the measure should be considered on the basis of an evaluation of the costs and benefits of specific projects, set against the stated objective of the Programme to assist investments critical to cost effective supply and consumption of fuel;
- cost implications of the mix of technologies for renewable energy should be addressed and a less specific approach should be adopted in order to facilitate supporting technologies which are closest to commerciality;
- consideration should be given to using EU funds to encourage projects using Combined Heat and Power Technologies (CHP) in certain circumstances;
- need for an evaluation of the proposed wave energy plant before the project is progressed; and indicators for the measure are good.

The EIOP Monitoring Committee has also asked that the timing of the implementation of the AERII (biomass/waste fuelled electricity station) and the AERIII projects should be examined to ensure that all of the ERDF funds for these schemes can be drawn down before the expiry of the Operational Programme.

5.2 **Underspending under the Measure:** The ERDF funding under the measure was intended to support renewable Energy projects arising from the first Alternative Energy Requirement Scheme (AERI) which involved the procurement of 75 MegaWatts of electricity from alternative sources. The target of 75 MW was exceeded, without recourse to the available ERDF grant. It was subsequently agreed by the Monitoring Committee that the ERDF funds would be used to support further renewable energy schemes - a biomass/waste fuelled electricity generating station (AERII) and additional renewable energy projects (AERIII).

5.3 **The Renewable Energy Measure is based on environmental rationale rather than economic rationale:** Renewable Energy addresses a number of National and EU energy policy fundamentals - exploitation of indigenous resources, diversification of energy sources, environmental requirements and targets set in the EU ALTENER Programme. Increased generation of electricity from renewable energy sources is a necessary requirement if the long term goal of sustainable development, which is the lynchpin of future development both at a National and European level, is to be achieved. The increased deployment of renewables in the generation of electricity has a number of environmental advantages and having regard to the "greening" of the Structural Funds, it is appropriate to provide ERDF support for the development of renewable energy. Ireland is lagging far behind other EU Member States in terms of the share of renewables in gross energy consumption - 2.2% compared with the EU average of 5.5%. Moreover, Ireland has a number of natural advantages in terms of renewable energy and having regard to the diminishing share of indigenous resources in energy consumption, it is essential that every effort be made to harness our natural resources.

5.4 **"Cost" of Renewable Energy:** The competitive tendering mechanism deployed in securing additional installed capacity ensures that the cost of renewable energy remains keen. For example, the winning AERII (waste to energy station) bid was 11 % below the price cap set for the competition. The reference price set for renewables in Ireland is among the most competitive in Europe.

The External Evaluator raised some concerns about the cost implications of the mix of technologies for renewable energy and the possibility that a lower level of spend could achieve the targets for the programme. The additional costs associated with the planned AERIII increment of renewable energy is estimated, by reference to an energy

Benchmark cost (based on best available conventional electricity generating technology,) to be of the order of IR£88 million over 15 years. When this increment of renewable energy is on stream, the annual cost is estimated to be of the order of IR£5.8 million which represents slightly more than a ½ of 1 per cent ESB's annual turnover. With regard to the Evaluator's views that a lower spend could possibly achieve the targets of the Operational Programme in relation to renewable energy, the level of grant for the development of the measure has been evaluated taking account of a number of factors not least the need to maximise the potential of the overall renewable energy resource and the need to develop the sector in a coherent manner. The mix of technologies, with the bias in favour of the best and most competitive renewable energy resource - wind - is a direct reflection of the results of the AERI competition. The amount of wind energy, in the target for the AERIII scheme, will have the effect of - deflating the overall minimal additional cost of the tranche even further.

It is accepted that capping the size of projects and allowing a spread of technologies may have relative cost implications, but this ignores the legitimate policy objectives of enhanced energy security and maximising indigenous sources which underpin the decision. The fact that some of these technologies, to a greater or lesser extent, are not commercially competitive is recognised in the EIOP as the very reason for supporting them. The recommendation that a less specific approach to technologies be taken would not achieve the desired results in terms of maximising the potential of the overall renewable energy resource.

5.5 **Need for an assessment of the costs and benefits of specific technologies and of specific major investments and the methodology for such assessments should be in accordance with best practice:** The terms of reference for the completed socio-economic cost benefit analysis of the AERII waste to energy station are in accordance with EU and Department of Finance Guidelines on Investment Appraisal. The terms of reference for the study were agreed with the European Commission.

With regard to the External Evaluator's recommendation that the rationale for increased output targets ought to be considered on the basis of a cost/benefit evaluation of specific projects and against the OP objective of assisting investment in cost-effective supply and consumption of fuel, this recommendation ignores the fact that both Irish and EU energy policy objectives in relation to renewables extend to a wider range of issues, than is the case with more established energy sources. In that regard the following is relevant:

- The extent to which indigenous energy sources are set to decline is more significant than was anticipated in 1994. According to the latest forecasts, indigenous sources will account for only 7% of Ireland's total supply in 2010. This has serious implications for security of supply and is being addressed specifically through the development of renewables.
- The EU Commission's Green Paper on Renewable Energy recognises that renewables face problems in terms of cost competitiveness and that these must be addressed. The Commission is seeking to set more ambitious targets for renewables. It is reasonable that the EU-funded EIOP should complement Commission proposals.

5.6 **ERDF support for Combined Heat and Power Plants:** The External Evaluator supported the provision of ERDF aid to encourage the development of Combined Heat and Power plants, provided there are low levels of deadweight, and projects with high rates of return are supported which would thereby make a positive contribution to industrial competitiveness. The Monitoring Committee proposes to reallocate £1 million within the Energy Efficiency Measure towards the development of CHP plant and the CSF Monitoring Committee's approval in this matter is sought in page 10. The assessment criteria for the CHP competition will take account of the External Evaluator's concerns about deadweight.

5.7 **Need for Evaluation of Wave Energy Plant:** The External Evaluator recommended that an independent assessment of (i) the likely cost of electricity produced by this resource and (ii) an evaluation of the risk involved is undertaken before the project is progressed. This recommendation reflected the Evaluator's doubts regarding the viability of this technology and the level of risks involved. The Department does not share these doubts. It should be noted that part of the remit of the Independent Agency to be engaged to conduct the AER III competition will be a rigorous assessment of the technical and financial feasibility of wave energy to electricity proposals put forward as part of the AERIII tender competition. Only one contract will be awarded, and that project will need to pass the most rigorous expert and independent scrutiny. The level of expertise in Ireland in the area of wave energy is recognised and respected not only within Europe but world-wide. The Department and the Power Procurer estimate that the additional costs associated with the wave generated electricity will not be significant and will be of the order of IR£1.3 million over 15 years.

5.8 **Achievable Project Schedule**

*AER III Waste to Energy Station..* The tender documentation, as well as the proposed contract for the biomass station identifies the timescales for the implementation of the waste to energy station. The significant milestones for the implementation of the waste to energy, project are as follows:-

Item	Completion Date
Planning and Licensing approval	March 1998
Civil Works	December 1998
Electrical works and mechanical completion	November 1999
Start-up and acceptance tests	December 1999
Commercial Operation	December 1999

The grant of €9.3 million for the station will be paid in two tranches - half on successful commissioning in 1999 and half throughout the year 2000 based on performance.

*AER III Competition including wave energy project:* The launch of the AER III competition involving an additional 100 MegaWatts of electricity from renewable sources has already taken place and a total of 270 expressions of interest have been received. The various stages of the competitive tender process for the AERIII are as follows:-

Item	Indicative Timescale
Issue of tender packs to registered applicants	June 1997
Deadline for formal application -Part 1 submission -Technical	July 1997

Completion of technical appraisal and provision of connection cost estimate	October 1997
Deadline for submission of tender part 2 submission and bid price KWh	November 1997
Project Selection	December 1997

The AER III competition will be finalised by end of 1997, giving recommended projects up to end 2000 to mature for grant payments. Capital grants for the established technologies (wind, hydro, biomass) will be paid on commissioning the plants for commercial operation, while the grant for the proposed pilot wave energy plant will be paid at pre-agreed construction phases, culminating in a final payment on certification of the plant for commercial operation. The tender documentation for the AERIII scheme requires that the various projects must be commissioned by 31 December 1999 to qualify for ERDF aid. While it is not possible at this stage to provide a detailed project execution schedule for the implementation of AERIII projects until the various tenders have been evaluated, some comfort can be drawn from the fact that some potential bidders have already secured planning permissions for their sites. The Department of Transport, Energy and Communications and the Power Procurer are satisfied that the entire ERDF provision for the AERIII scheme amounting to €9.3 million will be drawdown before the expiry of the Operational Programme.

#### **MONITORING COMMITTEE'S VIEWS ON RENEWABLES ENERGY MEASURE**

**The ERDF funding for the measure is intended to support the development of indigenous renewable sources in Ireland. This will enhance energy security by diversifying supply sources, assist in meeting international undertakings to reduce emissions of carbon dioxide, nitrogen and sulphur from electricity, generation and contribute to the EU target set in the ALTENER Programme. The Monitoring Committee anticipate that all of the ERDF funds for the measure will be spent before 31 December 2000. Expenditure under the measure will be kept under continuous review.**

#### **COMMUNICATIONS SUB-PROGRAMME**

##### **6 Telecommunication Measure (ERDF =€31.7 million)**

**6.1 External Evaluator's comments:** The External Evaluator's most significant comments and conclusions on the Telecommunications-Measure included the following.-

- A high quality competitive telecommunications infrastructure is a critical requirement for economic development in Ireland and investment in telecommunications should continue to be a high priority for Structural Funds;
- support is given for the existing level of funding for the measure remaining at or above its current allocation, provided the benefits of the investment enhance industrial competitiveness rather than producing a subsidy to Telecom Eireann;
- concerns expressed about potential deadweight and difficulties encountered in evaluating the impact of the measures, as the investments represent only a small element of the annual capital expenditure on the telecommunications network by Telecom Eireann;
- the measure should be refocused so that a very small number of significant ring-fenced projects can be identified, with clarity on the details of implementation: this would be

more appropriate than attempting to spread the EU funds too widely, across a range of small projects;

- many of the indicators are too general to measure the specific impact of each of the investments
- Consideration to be given to the establishment of a new sub-measure within the Telecommunications Measure to encourage a number of infrastructure projects (possibly of a pilot nature) to promote the "Information Society".

The Monitoring Committee has also asked that alternative projects should be identified to absorb some spare ERDF aid within the measure, freed up as a consequence of lower than expected cost for the Exchange Digitalisation programme. The projects would embrace actions to promote the development of the "Information Society" in Ireland in line with the European Commission's paper on "**Priorities for the adjustment of Objective 1 and 6 Structural Funds programmes to the end of 1999**".

**6.2 Need for a quality telecommunications network:** The Monitoring Committee concurs with the views of the External Evaluator in this regard. The investments being co-financed from the Telecommunications Measure were designed to ensure that the Irish economy does not fall behind the pace of development in the telecommunications sector as a whole and that it is in a position to exploit the potential offered by new technology and the "Information Society".

**6.3 Contribution towards industrial competitiveness:** The Monitoring Committee re-inforced its view that the investments should enhance the productive capacity of the economy and thereby contribute to the creation of sustainable and new jobs in the main population centres. The absence of a modern telecommunications network would seriously impair the capacity of the economy to provide sustainable employment in Ireland. There is no question of ERDF funds being used as a subsidy for Telecom Eireann.

**6.4 Difficulties encountered by the External Evaluator in measuring the impact of the co-financed investments:** The Monitoring Committee does not share the concerns of the External Evaluator about potential deadweight. The telecommunications investments under the Operational Programme, agreed with the European Commission, were selected on the basis that they would accelerate the development of the telecommunications network in the country. The EU backed investments are consistent with the broad thrust of the **Thematic Evaluation of Investments in the Telecommunications Sector in Ireland** commissioned by the European Commission. Moreover, having regard to the scale of on-going investment in the telecommunications network in Ireland and the demands on capital funding in Telecom Eireann, it is entirely appropriate to provide funds towards selected projects, which would bring forward benefits by a number of years. The projects would have been delayed by a number of years in the absence of EU funding. The need for accelerated infrastructural enhancement is brought into even sharper focus on foot of the reduced liberalisation derogation timetable set, by, the European Commission for the telecommunications market in Ireland.

**6.5 Need to refocus the measure and develop ring-fenced projects:** The Monitoring Committee agrees in principle that, it would be better to ring fence projects and to develop sharper indicators which would facilitate the monitoring of the impact of the specific investments. However, it is not always possible to do either (or both) but these considerations alone should not be a disqualifying factor in project selection. Any approach which sets rigid pre-conditions in the area of indicators and ring-fencing may not result in the most deserving projects being selected for EU aid. The EU investment in the network to date has been designed to achieve Telecom Eireann's objective of having

in place a high quality mainly digital network with advanced signalling and service capability by the end of 1999. Some elements of the work under the Telecommunications Measure have already been completed and others are at an advanced stage of implementation.

6.6 **Many of the indicators are too general to measure the specific impact of each of the investments:** The Monitoring Committee recognises the importance of appropriate indicators to measure the impact of particular investments under the Operational Programme. The indicators for the measure do not provide an), specific indication of the impact of the particular investments under the Operational Programme. The generality in the indicators is a direct consequence of the fact that the specific EU backed investments under the measure represent only a relatively small part of the on-going investment, in an integrated network, and it is almost impossible to measure the specific impact of the relatively small scale investments under the measure. The general nature of the indicators for the telecommunications measure has been discussed at various meetings of the Monitoring Committee. Notwithstanding the generality of the indicators, they do provide the Monitoring Committee with a range of information in relation to the performance of Telecom Eireann in the delivery of services and on the extent of digitalisation of the network. This information is beneficial to the Monitoring Committee and the CSF Monitoring Committee in monitoring overall trends and ensuring that the telecommunications network is responding adequately to the increasing expectations of the business and commercial sectors of the economy. Furthermore, it should be noted that more demanding indicators have been approved during the life-time of the Operational Programme for the Telecommunications Measure of the Operational Programme.

6.7 **ERDF funding within the Telecommunications Measure for the Development of the "Information Society" in Ireland:** The Monitoring Committee recommends that "spare" ERDF resources of the order of €12 million in the measure (becoming available as a consequence of lower than expected costs for the Exchange Digitalisation Programme) should be retained within the measure and used for the development of infrastructure which would promote the development of the "Information Society" in Ireland in line with the recommendations of the **Report of the Information Society Steering Committee**. The Government has decided that these "spare" ERDF resources within the measure should be used for this purpose. The Government's decision is in line with the European Commission's proposals for the development of the Information Society set out in the draft paper on **"Priorities for the adjustment of Objective 1 and 6 Structural Funds programmes to the end of 1999"**. In the context of the liberalisation of the telecommunications market, public companies as well as private sector companies will have an opportunity to submit proposals for funding. It would not be appropriate to confine the distribution of the "spare" funding to Telecom Eireann only. The EIOP Monitoring Committee has approved the establishment of a sub-committee within the Monitoring Committee to select priorities for funding and appraisal criteria to be used in the assessment of tender proposals for particular projects.

#### **MONITORING COMMITTEE'S VIEWS ON THE TELECOMMUNICATIONS MEASURE**

The Monitoring Committee recommends that telecommunications infrastructure should continue to be a high priority for ERDF funding over the remaining years of the Operational Programme. The Committee seeks the endorsement of the CSF Monitoring Committee to use "spare" resources of the order of €12 million for the development of infrastructure -which would promote the "Information Society" in Ireland and assist industrial competitiveness. The Monitoring Committee has concluded that it is not possible to define

specific indicators for some of the investment under the measure but that aggregate indicators of sectoral performance are a more useful basis for assessing performance. However, the question of indicators will be revisited with the External Evaluator.

7. **Distribution of 1996 "Deflator" provision:** The June 1996 meeting of the CSF Monitoring Committee approved a total of 0.843 MEW for the Economic Infrastructure Operational Programme arising from the application of the 1996 "deflator" to the ERDF provision of the Programme. The EIOP Monitoring Committee propose that these "spare" resources should not be distributed on a pro-rata basis across the various measures of the Operational Programme - but they should be amalgamated with other ERDF funds which it is proposed to reallocate within the Operational Programme in order to develop new projects. (See table below)

## 8 Reallocations within the Economic Infrastructure Operational Programme

**Views of the External Evaluator:** The External Evaluator made a number of recommendations in relation to the reallocation of ERDF funds within the programme which included the provision of ERDF funding for the Information Society, Rural Electricity Networks, support for Combined Heat and Power and a reduced ERDF provision for the Energy Efficiency Measure of the Operational Programme.

The EIOP Monitoring Committee discussed the reallocation of some ERDF funds within the Operational Programme at its March 1997 meeting. The CSF Monitoring Committee is asked to approve the following adjustments within the Operational Programme:-

Measure	Extent of ERDF to be reallocated	Proposed Measure	Aid to be used for
Energy Efficiency	2.54 MEW	Energy	Combined Heat and Power projects (1.338 MEW or IR£1 million)
		Renewable Energy	
1996 Deflator	0.843 MEW + outstanding amount from the Energy Efficiency 0.54 MEW	Rural Networks	Provision of mains supply to Clare Island and Inis Bofin (1.383 MEW or IR£1.03m)
Telecoms	12 MEW	Telecoms	Development of Infrastructure to promote the "Information Society" in Ireland

**Request to the CSF Monitoring Committee:** The EIOP Monitoring Committee has completed a thorough review of the Economic Infrastructure Operational Programme with the assistance of independent consultants. A number of issues have been identified by the External Evaluator which will be followed up.



The CSF Monitoring Committee is asked to note the EIOP Monitoring Committee's specific responses to the main issues raised by the External Evaluator and to approve the reallocation of some ERDF aid within the Operational Programme.

EIOP Secretariat  
22nd May 1997

**Appendix 5**  
**Economic Infrastructure Operational Programme Monitoring Committee**  
**Paper on “Community Structural Assistance and Employment”**

## **Background**

The European Commission has asked the Chairperson of each Operational Programme Monitoring Committee to put the topic of **Community Structural Assistance and Employment** on the agenda for the next meeting of the Monitoring Committee and to report on the outcome of discussions to the CSF Monitoring Committee meeting in December, 1996. The Commission also wish this matter to be addressed as part of the Mid- Term Review of all Operational Programmes.

The Commission is required to produce an interim report on **Community Structural Assistance and Employment** for the Dublin European Council. The Presidency will be hosting a seminar for Regional Policy Ministers on 14/15 November 1996 at which employment and the Structural Funds will be a main item for discussion.

This paper reflects the views of the Monitoring Committee of the Operational Programme for Economic Infrastructure on “Community Structural Assistance and Employment”. The paper was discussed by the Monitoring Committee at its meeting on 27<sup>th</sup> September 1996. The paper was approved by the Monitoring Committee by Written Procedure.

### *Scope of Commission's Proposals*

It is the Commission's desire that all those involved in implementing structural policies should step up their efforts to give operations financed by the Structural Funds a greater employment content. Monitoring Committees are being asked to identify adjustments, within current programming arrangements, which might increase the impact on growth and the impact of growth on employment. This involves examining the scope for manoeuvre and flexibility available within current programming in order to pursue the following goals:

- providing the conditions for long-term economic growth;
- increasing the job-intensity of economic growth;
- promoting a more active approach to economic and social solidarity including equal opportunities;
- enhancing arrangements for greater participation by public and private bodies in the context of the Structural Funds.

## **Operational Programme for Economic Infrastructure 1994-1999**

The Operational Programme for Economic Infrastructure 1994-1999 provides for investment of £259 million in postal, energy and telecommunications infrastructure and services of which £86 million is being provided by the ERDF. The programme represents only a small part of the total investments planned for the three sectors for the period 1994 to 1999.

The Operational Programme comprises two main Sub-Programmes - one on energy and one on communications which are complemented by a third sub-programme on Technical Assistance. The Energy Sub-Programme is designed to contribute towards the development of a cost efficient energy sector by providing support for key investments in energy infrastructure and energy efficiency measures. The Communications Sub-Programme is also designed to support cost-effective services provision in the postal and telecommunications sectors by providing ERDF assistance for selected projects in these areas.

#### Employment Opportunities arising from the co-funded investments under the OP.

The Monitoring Committee is aware that the creation of employment is one of the stated primary objectives of economic policy in Ireland and the EU as a whole. The EU's White Paper - *Growth, Competitiveness & Employment* - clearly recognises that it is the responsibility of the National and European authorities to provide industry with a favourable environment, to open up clear and reliable prospects for growth and to improve international competitiveness. The measures receiving ERDF assistance under the Operational Programme were selected on the basis of their contribution towards the achievement of the aims and objectives of the Community Support Framework generally which includes the provision of adequate infrastructure to help offset Ireland's geographic and structural disadvantages thereby ensuring an adequate base for employment and wealth generating activity.

The Monitoring Committee is aware that a strong, sustainable and employment creating growth pattern cannot be obtained by decree. It can only result from the dynamism of market forces supported by a public policy framework which facilitates and encourages economic growth and job creation. In this context, the investment initiatives, provided under the EIOP, have a positive stimulative role to play. Accordingly, the Monitoring Committee wishes to highlight the fact that the implementation of the measures of the Operational Programme will give rise to improved employment opportunities through:-

#### *Direct employment*

- the construction and physical implementation phases of the different measures under the Operational Programme.

#### *Indirect employment*

- ensuring that the postal, energy and telecommunications sectors provide competitive, efficient and effective services and thereby stimulating employment in the wider economy.

- the investments being undertaken under the OP offer the opportunity for closer integration with other CSF investments aimed at offsetting the economic impact of peripherality and under-development.

The Monitoring Committee also notes that the employment impact of the investments under the Operational Programme will not be confined to Ireland solely. It is inevitable that goods and services may be acquired outside Ireland, but within the Single Market, and consequently any positive employment impact is not confined to Ireland but is a shared impact across the Community. As well as the wider geographic impact, there is also the wider trans-sectoral impact. Accordingly the investments under the Operational Programme can lever a number of down-stream benefits which are difficult to quantify but can make a positive contribution towards increased employment in the economy. These down-stream benefits include:-

- increased spending power of those employed within the economy as a result of increased direct employment on projects funded under the Operational Programme;
- increasing the spending power and market strength of organisations whose competitiveness is improved as a result of actions taken under the Operational Programme;
- assisting in a switch in spending, from commodities with a low labour content, to goods and services with a much higher labour content; and
- assisting in the re-distribution of employment towards regions and communities where unemployment is high.

The Monitoring Committee is cognisant of the difficulties of providing precise estimates of the scale of potential employment creation directly attributable to the different measures under the EIOP. While fairly specific estimates can be given for employment creation in the context of the construction and on-going operation of the new peat generating station, it is virtually impossible to provide meaningful estimates of what the employment creating impact is on foot of the investment earmarked for the enhancement of telecommunications under the EIOP .

This is not to suggest that attempts should not be made to measure such impacts. Indeed, recognising the importance of establishing the potential impact of energy efficiency actions on employment, a study - ENERGY EFFICIENCY AND EMPLOYMENT IN IRELAND - prepared for the Energy Advisory Board is currently under consideration. This as well as other studies suggest that energy efficiency measures have a significant impact on employment, and that this impact can be estimated. It is against this background that the following table set out a statement of “Employment Opportunity under the EIOP”, which is largely qualitative rather than quantitative.

<b>Table: Employment Opportunities Under the EIOP Energy Sub-Programme</b>	
<i>Measure</i>	<i>Employment Opportunities</i>
Peat Generation	Jobs in new Station 40-90
	450 jobs in construction of new plant
	500 new and sustained jobs in turf production (250 fulltime and 250 part-time)
Renewable Energy	Substantial regional and local employment arising from implementation and operation of renewable energy installations
	The development of a biomass fuelled electricity generating station will provide new and sustainable local employment
Energy Efficiency	Installation of energy efficient technologies and improved energy management will contribute to job creation and improve competitiveness. The estimated spin-off is 200 jobs. Within the industrial and commercial sectors, indirect employment of at least 200 jobs is expected.
Rural Networks (installation of electricity at Cape Clear and the Aran Islands)	The installation of a reliable electricity supply at these peripheral locations will make a substantial contribution to sustaining socio-economic activity and enhance the quality of life on the Islands
Cutaway Peatlands	Seasonable employment will become available arising from the rehabilitation of industrially cutaway peatlands. Some graduates will be recruited to undertake a number of studies in connection with this project. Eco-tourism type holidays will materialise when the project is completed.
<b>Communications Sub-Programme</b>	
<i>Measure</i>	<i>Employment Opportunities</i>
Postal Services	Construction of new mail centres and automation of rural post offices will give rise to some direct employment. The automation of rural post offices will enhance their attractiveness for conducting financial and other transactions thereby contributing to local development and renewal
Telecommunications	A modern and reliable network is a fundamental component of Ireland's industrial policy.

## **Technical Innovation and the Promotion of Information Society**

The Monitoring Committee recognises that as information and communication technologies have become more widespread, attention has focused on the economic and social impact of the emerging "information society". The speed of dissemination of information and communications technologies stems largely from the economic advantages they are able to deliver. The Monitoring Committee considers that there is great potential for the growth of completely new forms of employment in the Information Society. But as the EU's High Level Group on the Information Society pointed out "nothing will happen automatically. We have to act to ensure that these jobs are created here, and soon. And that means public and private sectors acting together".

The Monitoring Committee notes that the investments being undertaken with assistance from the OP in the telecommunications network will contribute to the development of the necessary infrastructure to permit the expansion of the Information Society in Ireland. It should be noted that the Monitoring Committee approved the allocation of extra resources to Telecom Eireann arising from the 1995 “deflator” for the development of the Synchronous Digital Hierarchy rings linking the main population centres in the country. The introduction of SDH will help to maintain Ireland’s position at the forefront of technologically advanced telecommunications networks.

Furthermore, the Monitoring Committee has endorsed proposals being prepared by Telecom Eireann to develop a strategy to intensively market their advanced services to Small and Medium Enterprises which will create an awareness of the benefits of advanced digital communications services for small business enterprises. With the availability of new services such as ISDN and high speed, high quality data transmission, Telecom Eireann is endeavouring to build awareness, knowledge and understanding among the SME customer base of the IT applications and products available to them. As part of the development of the new communications strategy, Telecom Eireann will be liaising with IBEC, SME representative associations, Forbairt, County Development Teams and other organisations with an interest in developing SME’s. Specific customised packages will be developed by Telecom Eireann to meet the needs of particular market segments.

The traditional character of the telephone network is rapidly changing. It now has to meet multi-communication requirements of a modern economy. In this regard, new technological advances in telecommunications offer the opportunity of teleworking in Ireland. Forbairt and Telecom Eireann are developing a Teleworking Pack which will provide information on the facilities available to promote this type of working arrangement.

The Monitoring Committee awaits the Report of the Information Society Steering Committee established by the Department of Enterprise and Employment on a strategy for the development of the Information Society in Ireland. The Monitoring Committee proposes to defer any decision on the allocation of the 1996 “deflator” resources made available for the Economic Infrastructure Operational Programme until the March 1997 meeting of the Committee. This will enable the Monitoring Committee to consider the conclusions of the Report of the Steering Committee and to review the possibilities of co-funding further telecommunications network enhancements which might further assist the promotion of the information society.

### Summary and conclusions

The investments being undertaken under the Economic Infrastructure Operational Programme will contribute to sustained economic growth, and to employment creation at a local and regional level. However, the scale of this positive contribution has to reflect the fact that the investments being undertaken under the Operational Programme are relatively small compared to the total investments being undertaken in the postal, energy and telecommunications networks in Ireland during the programming period.

The proposed expenditure on the peat fired station (Peat Generation Measure) and the Renewable Energy Measure of the **Energy Sub-Programme** of the Operational Programme, recognise that there are positive externalities associated with these developments -local and regional

development, employment and income generation, the adoption of new technologies and the use of indigenous sources. Further benefits will arise as the experience and expertise garnered from participation in the renewable energy projects in the home market and as an export commodity. In addition, the energy efficiency expenditures can lead to significant direct and indirect employment as result of increased competitiveness, increased spending power, and a switch to more labour-intensive energy efficiency technologies. Here, too, further benefits can accrue as awareness of the benefits of energy efficiency is increased, and as a pool of expertise in this area is developed.

The investments under the **Communications Sub-Programme** will have in-direct benefits. The availability of new advanced telecommunications services throughout the country will assist regional development. The telecommunications investments will contribute to competitiveness which is essential to wider economic development. The Postal Services investments will improve An Post's capability to provide an efficient and affordable universal service and the computerisation of rural post offices will contribute to local development.

Agencies involved with the implementation of the investments under the Operational Programme are liaising and consulting relevant parties to maximise the utilisation of the infrastructure facilities being co-funded under the Operational Programme which will ensure that the job-creation potential of the investments being grant aided under the Operational Programme is maximised. The Monitoring Committee will make arrangements to ensure that any new projects put forward for grant assistance under the Operational Programme takes account of the job-creation possibilities.

It should be emphasised that employment in the overall economy depends critically on the ability of the Agencies involved with the implementation of the OP investments to:-

- Cope with increasing competition, which will become even more severe in the medium to long term;
- Operate flexibly and imaginatively in existing and new commercial markets;
- Adapt successfully to changing regulatory environments.

**EIOP Monitoring Committee Secretariat**  
**1 October 1996**

**APPENDIX 6**  
**Monitoring Committee**  
**of**  
**Economic Infrastructure Operational Programme**

**EQUAL OPPORTUNITY FOR MEN AND WOMEN**  
**ECONOMIC INFRASTRUCTURE OPERATIONAL PROGRAMME**

**BACKGROUND**

The investments being implemented under the Economic Infrastructure Operational Programme have an infrastructural orientation which are intended to assist the postal, energy and telecommunications sectors with a view to increasing the level of service to industry and thereby promote economic growth and enhance opportunities for both men and women. These investments will have a positive stimulative role in assisting the creation of paid employment which is a major aspect of participation by men and women in economic and social activity. There is no discrimination against men or women or any impediments to access by either sex in respect of any of the operations being implemented under this particular Operational Programme or within the regulatory framework for the energy or communications sectors of the economy. All of the agencies involved with the implementation of the Operational Programme operate equal opportunities policies and they are subject to relevant equality legislation. In particular, it should be noted that the External Evaluator in the mid-term evaluation noted that the Operational Programme “has very little if any impact on the promotion of equal opportunity but the external evaluator has no evidence to suggest that the implementing agencies involved are not firmly committed to equal opportunity objectives”.

**OPPORTUNITIES FOR SPECIFIC MEASURES WITHIN THE EIOP TO PROMOTE GREATER EQUALITY AMONGST MEN AND WOMEN**

The opportunities for taking a pro-active role in promoting specific initiatives to equal opportunity for men and women in the context of the Economic Infrastructure Operational Programme are generally fairly limited on the following grounds:-

- the specific infrastructural nature of the investments under the Operational Programme. These are once-off infrastructural investments which enable new or enhanced services to be provided for the postal, energy and telecommunications sectors;
- a significant part of the investments under the Operational Programme will have a very marginal and indirect impact on work-place innovations, which is considered to be the forum to provide greatest opportunity to increase equal opportunity involving employee participation, positive flexibility, improvements in the distribution of work and flexible working hours;
- the Operational Programme is not concerned with any training of workers in relation to the sectors covered by the Operational Programme.



## **PROMOTION OF THE INFORMATION SOCIETY**

It should be noted that the emerging area of the “Information Society”, for which this Operational Programme now has a separate measure following the CSF Mid-Term Review of 1997, heralds prospects of promoting greater gender equality. It offers great potential for the growth of completely new forms of employment. The investments related to the “Information Society” will assist the development of teleworking which offers possibilities for new types of employment as well as flexible work arrangements for both men and women. Teleworking will be particularly advantageous to men and women in circumstances where there are young children, long commuting distances and/or low car or public transport availability and possibly a lower attachment to career progress. With expanded teleworking capability, the opportunities to provide new higher quality local job opportunities for low mobile groups can be increased. Such trends are likely to be conducive to the promotion of a policy of equal opportunity particularly for marginalised groups and mobility impaired persons.

May 1998

## APPENDIX 7

This Appendix lists the main EU Regulations, Decisions etc., governing the administration of the European Regional Development Fund (ERDF), as listed in Form A of Department of Finance Circular 23/98 (Dublin, December 1998):

- Framework Regulation:

Council (EEC) No. 2081/93 amending Regulation (EEC) No. 2052/88 on the tasks of the Structural Funds and their effectiveness and on co-ordination of their activities between themselves and with the operations of the European Investment Bank and the other existing financial instruments.

- Co-ordination Regulation:

Council Regulation (EEC) No. 2082/93 amending Regulation (EEC) No. 4253/88 laying down provisions for implementing Regulation (EEC) No. 2052/88 as regards co-ordination of the activities of the different Structural Funds between themselves and with the operations of the European Investment Bank and the other existing financial instruments.

- ERDF Regulation:

Council Regulation (EEC) No. 2083/93 amending Regulation (EEC) No. 4254/88 laying down provisions for implementing Regulation (EEC) No. 2052/88 as regards the European Regional Development Fund.

- Council regulation (EC Euratom No.) 2988/95 on the protection of the European Communities Financial Interests.
- Council Regulation (Euratom, EC) No. 2185/96 concerning on-the-spot checks and inspections carried out by the Commission to protect the European Communities financial interests against fraud and other irregularities.
- Commission Regulation (EEC) No. 1866/90 on arrangements for using the ECU for the purposes of the budgetary management of the Structural Funds.

- Commission Regulation (EC) No. 1681/94 concerning irregularities and the recovery of sums wrongly paid in connection with the financing of the structural policies and the organisation of an information system in this field.
- Commission Regulation (EC) No. 2064/97 establishing detailed arrangements for the implementation of Council Regulation (EEC) No. 4253/88 as regards the financial control by Member States of operations co-financed by the Structural Funds.
- 1994-1999 Community Support Framework for Ireland.
- Commission Decision C(97) 1035/8 of 23/04/1997 modifying the decisions approving the Community Support Frameworks, the single programming documents and the Community Initiatives programmes in respect of Ireland (Factsheets 1 to 22).
- Commission Decision(s) in respect of the Operational Programme(s) for which your Department has responsibility.
- Commission Decision No. 94/342/EC of 18 June 1994 concerning minimum publicity requirements.
- Council Resolution of 2 December 1996 on mainstreaming equal opportunities for men and women into the European Structural Funds.
- “Net Corrections in the context of the application of Article 24 of Regulation (EEC) 4253/88”, 15 October 1997, which constitutes guidelines for use by the Commission Department’s in applying Article 24 of Regulation (EEC) 4253/88.

# **Appendix 8**

**Memorandum of Understanding**

**Between**

**The Commission of the European Communities**

**And**

**the Minister for Transport, Energy and Communications of Ireland**

**On**

**Community Structural Funding**

**For**

**Peat Fired Electricity Generation**

## **1. Introduction**

The Commission of the European Communities and the Minister for Transport, Energy and Communications of Ireland, referring to the agreed Operational Programme for Economic Infrastructure and in particular to the proposal contained therein for the partial funding of a new peat fired electricity generating station to be situated in the East Midlands of Ireland and to the extensive discussions which have taken place on this proposal, agree the following conditions for the disbursement of Community Structural Funds for this project. The Department of Transport, Energy and Communications will monitor the fulfilment of these conditions and will report biannually to the Commission until 2006.

## **2. Jobs.**

The Minister believes that this project is vital to the continued development of, the East Midlands area. The Minister will ensure that Bord na Mona, the semi-state body charged with peat extraction and supply, will create some 250 permanent and 250 seasonal jobs (that is, 375 job years per annum) in peat production and related activities on the bogs supplying peat to the proposed station. The Minister estimates that there will be 64 jobs in operating the station and 25 jobs in support and ancillary activities.

It is anticipated that there will be 700 job years involved in the construction of the station and a further 420 job years in the development of the bogs and associated works.

## **3. CO<sub>2</sub> Emissions**

The Irish Government has signed and ratified the UN Framework Convention on Climate Change and has forwarded an initial communication on Ireland's CO<sub>2</sub> abatement policies and measures to the Commission and to the UN Convention Secretariat. The target set is to limit increases in

CO<sub>2</sub> emissions to, at most, 20% over 1990 levels by the year 2000. The proposed new peat fired station can be accommodated within this growth limitation target. The new station will give rise to a temporary increase in emissions of CO<sub>2</sub> from peat fired stations, but the phased decommissioning of the oldest and least efficient peat fired units will lead to an overall reduction in CO<sub>2</sub> emissions from peat fired plants. The Irish Government is conscious of the Commission's concerns in relation to emissions of CO<sub>2</sub> arising from the combustion of peat. Existing peat fired stations in general are old and have moderate to low conversion efficiencies. Some are near the end of their operational lives. It is the intention of the Minister to ensure the early commencement of a programme of phased closure of these stations as they reach the end of their operational lives and the refurbishment of other stations to improve their efficiencies from an operational and environmental perspective: A definite programme will be agreed at an early date with the Electricity Supply Board and Bord na Mona. Emissions of CO<sub>2</sub> will decline from 2.79m tonnes in 1994 to 2.68m tonnes in 1997 but will increase to 3.69m tonnes with the coming on stream of the new station in 1999. Emissions will decline steadily thereafter to reach 2.36m tonnes in 2006 with the decline continuing as stations reach the end of their operational lives. The attached table outlines the anticipated profile of CO<sub>2</sub> emissions from peat fired electricity generation up to 2023.

#### **4. Cutaway Bogs.**

Minister and the Commission have concerns in relation to the environmental aspects of cutaway bogs following peat production. The Minister will impose a condition on Bord na Mona to implement a development plan for the bogs supplying the new station after the peat is extracted, dividing areas between coniferous forestry, deciduous forestry, grassland and wetlands. Bord na Mona expect to have about 400 hectares of their total estate developed as wetlands by end 1999. They will use 26,000 hectares of bogs to supply peat for the new station over its lifetime and

anticipate that about 7,000 hectares of this area will be suitable for wetlands development. The Minister will ensure that Bord na Mona achieve this target. The first cutaway bogs suitable for wetlands development in this area will become available for development from about 2007 onwards. , The Minister will ensure that these wetlands fully realise their tourism and amenity potential.

## **5. Technology**

The Minister is committed to the use of the latest state of the art proven technology in the operation of the station. The Minister has been advised that the most appropriate combustion technology is fluidised bed technology and that it is capable of conversion efficiencies of 36.7% under Irish conditions. The call for tender will specify requirements with respect to the efficiency of and emissions from the plant. There will be full compliance with all relevant EU Regulations and Directives in the tendering and planning processes and in the operation of this station.

## **6. Implications for Ireland/UK Gas Interconnector**

It is the intention of the Irish Government that the gas interconnector to the United Kingdom, partially funded under the Commission's REGEN initiative, will be used to its maximum capacity .The Minister is convinced that the construction and operation of this new peat fired station is fully in line with national and Commission's energy policy, notably the national security of supply dimension of that policy. It will not have any major implications for the envisaged viability of the interconnector project. The market for electricity in Ireland is growing at the rate of about 150 MW per annum and the insertion of the new peat station in the generation plant programme will mean a delay of at most one year in the alternative gas fired electricity

generating station programme thus putting back by up to one year the expected attainment of maximum usage of the pipeline and postponing the anticipated achievement of economic break-even from 2003 to 2004. The interconnector will now reach 50% of capacity utilisation in 2000 as against 1999 and full capacity in 2011 as against 2015 shown in the original assessment done in 1990. However, since 1990 the development of the gas sector in Ireland has been better than originally anticipated in the 1990 feasibility study of the economics of the interconnector in that the premium sector has had higher growth than anticipated and also, it now seems probable, contrary to the original assumption made in the feasibility study, that fertiliser manufacture from natural gas will likely continue in Ireland after the year 2000.

## **7. ERDF Funds**

Funding sought for the peat fired electricity generating project will not exceed that provided in the Operational Programme for Economic Infrastructure.

Signed on behalf of the Commission of the European Communities

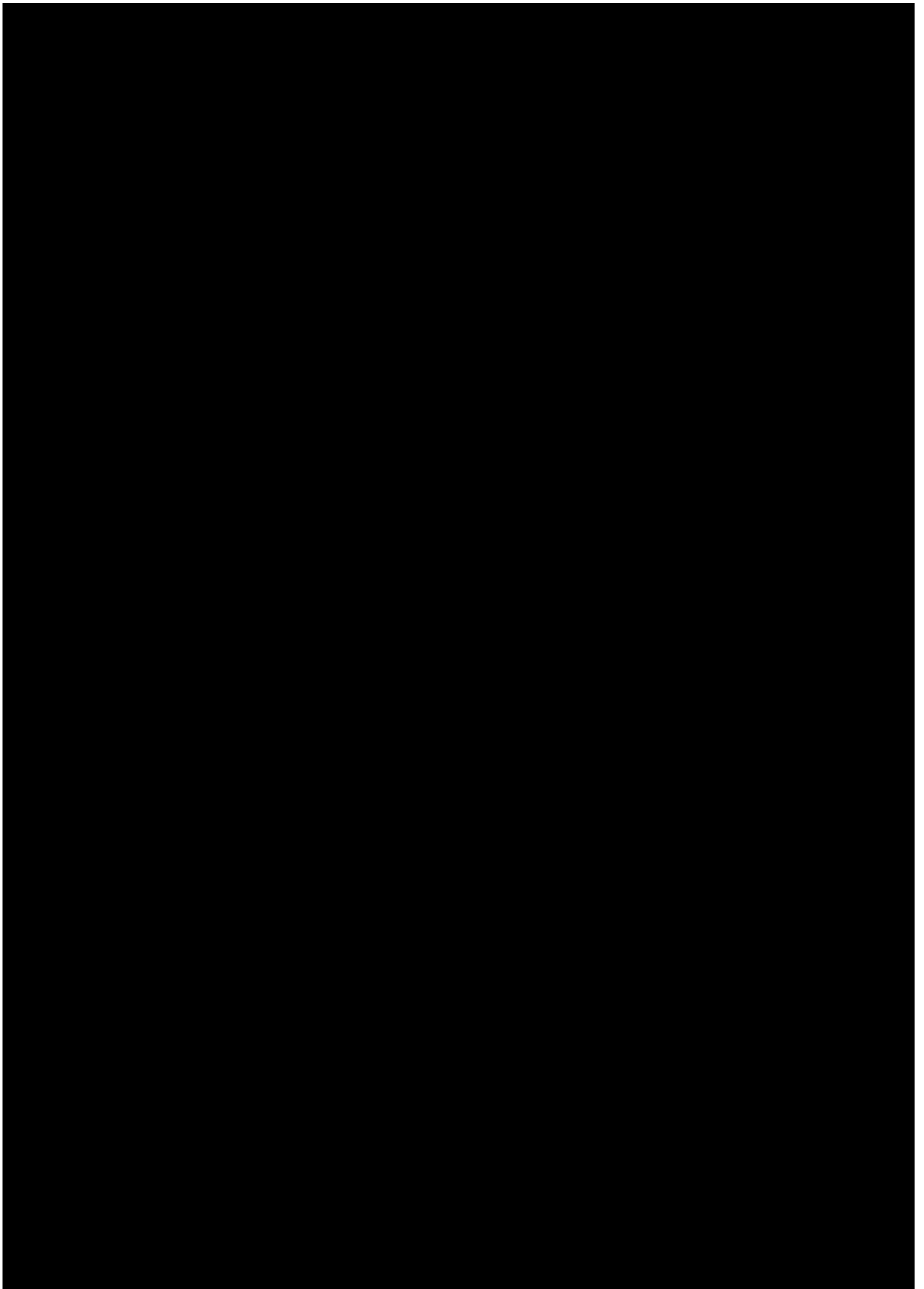
Signed: Michael Lowry

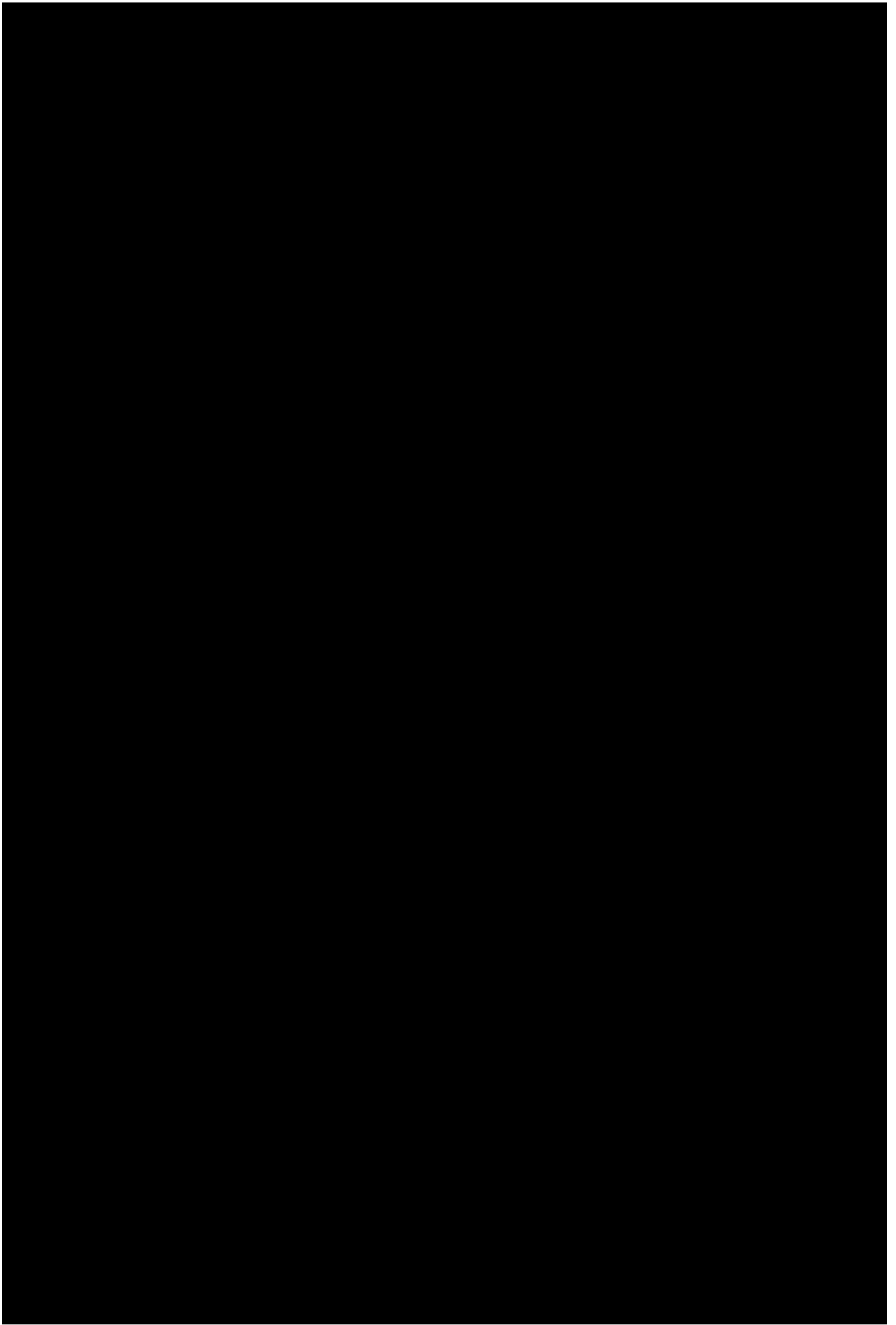
Minister for Transport, Energy and Communications of Ireland

Dated this 12th day of April 1995.

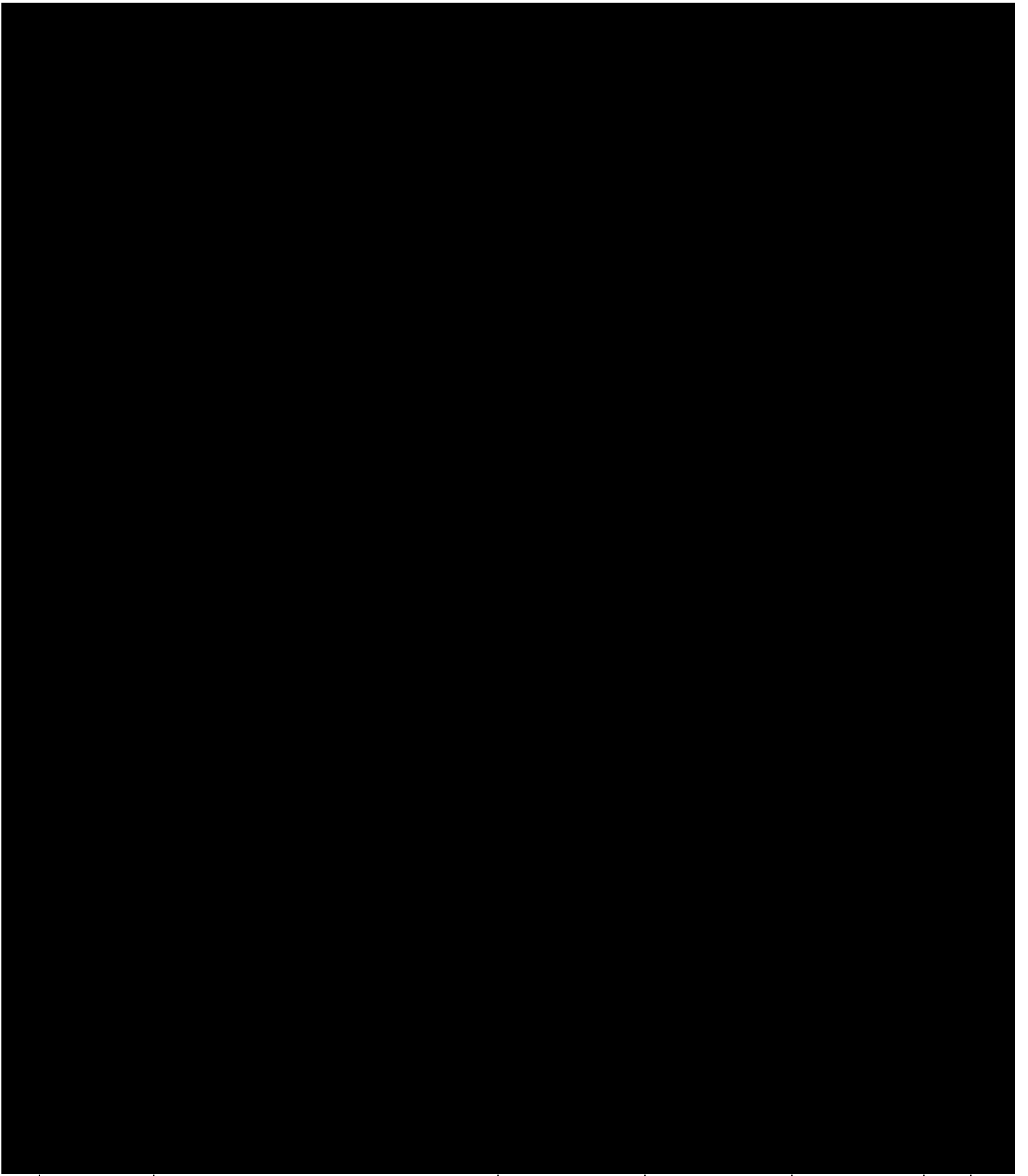


Year	Tonnes of Peat kT	Carbon MT	CO2 MT	GWh	CO2 tonnes/MWh generated
1990	3415	0.85	3.13		
1991	3370	0.84	3.09		
1992	3414	0.85	3.13		
1993	2997	0.75	2.75		
1994	3050	0.76	2.79	1919	1.456
1995	3050	0.76	2.79	1889	1.480
1996	2961	0.74	2.71	1813	1.497
1997	2920	0.73	2.68	1965	1.362
1998	3917	0.98	3.59	2510	1.430
1999	4030	1.01	3.69	2816	1.311
2000	3800	0.95	3.48	2711	1.284
2001	3810	0.95	3.49	2719	1.284
2002	3790	0.95	3.47	2705	1.284
2003	3820	0.96	3.50	2724	1.285
2004	3620	0.91	3.32	2601	1.275
2005	2780	0.70	2.55	2040	1.249
2006	2580	0.65	2.36	1967	1.202
2007	2280	0.57	2.09	1771	1.180
2008	2220	0.56	2.03	1733	1.174
2009	2250	0.56	2.06	1751	1.178
2010	2280	0.57	2.09	1773	1.178
2011	2280	0.57	2.09	1773	1.178
2012	2280	0.57	2.09	1773	1.178
2013	2280	0.57	2.09	1773	1.178
2014	2220	0.56	2.03	1735	1.173
2015	2250	0.56	2.06	1753	1.176
2016	2280	0.57	2.09		
2017	2200	0.55	2.02		
2018	1900	0.48	1.74		
2019	1850	0.46	1.70		
2020	1800	0.45	1.65		
2021	1750	0.44	1.60		
2022	1700	0.43	1.56		
2023	1300	0.33	1.19		

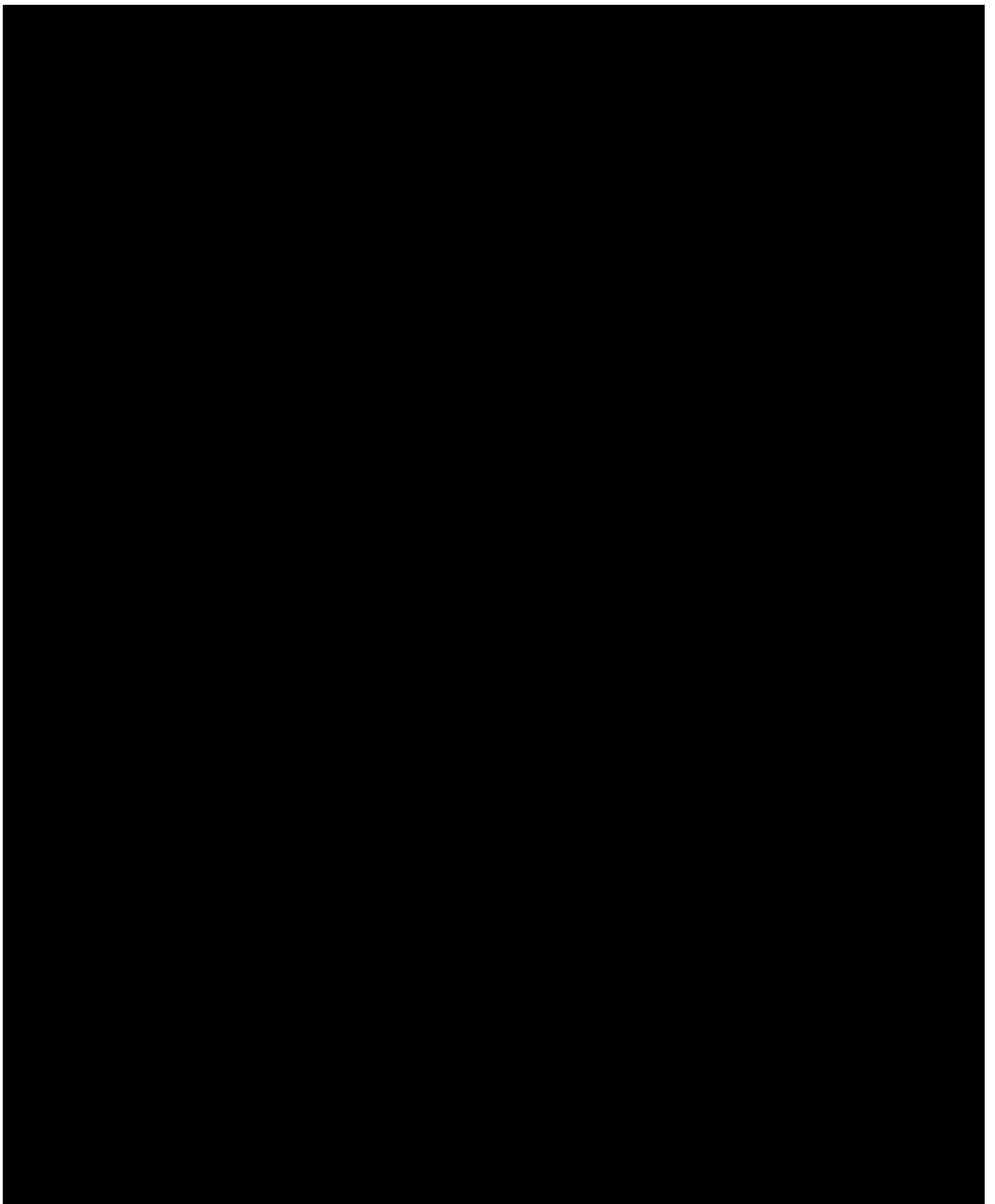


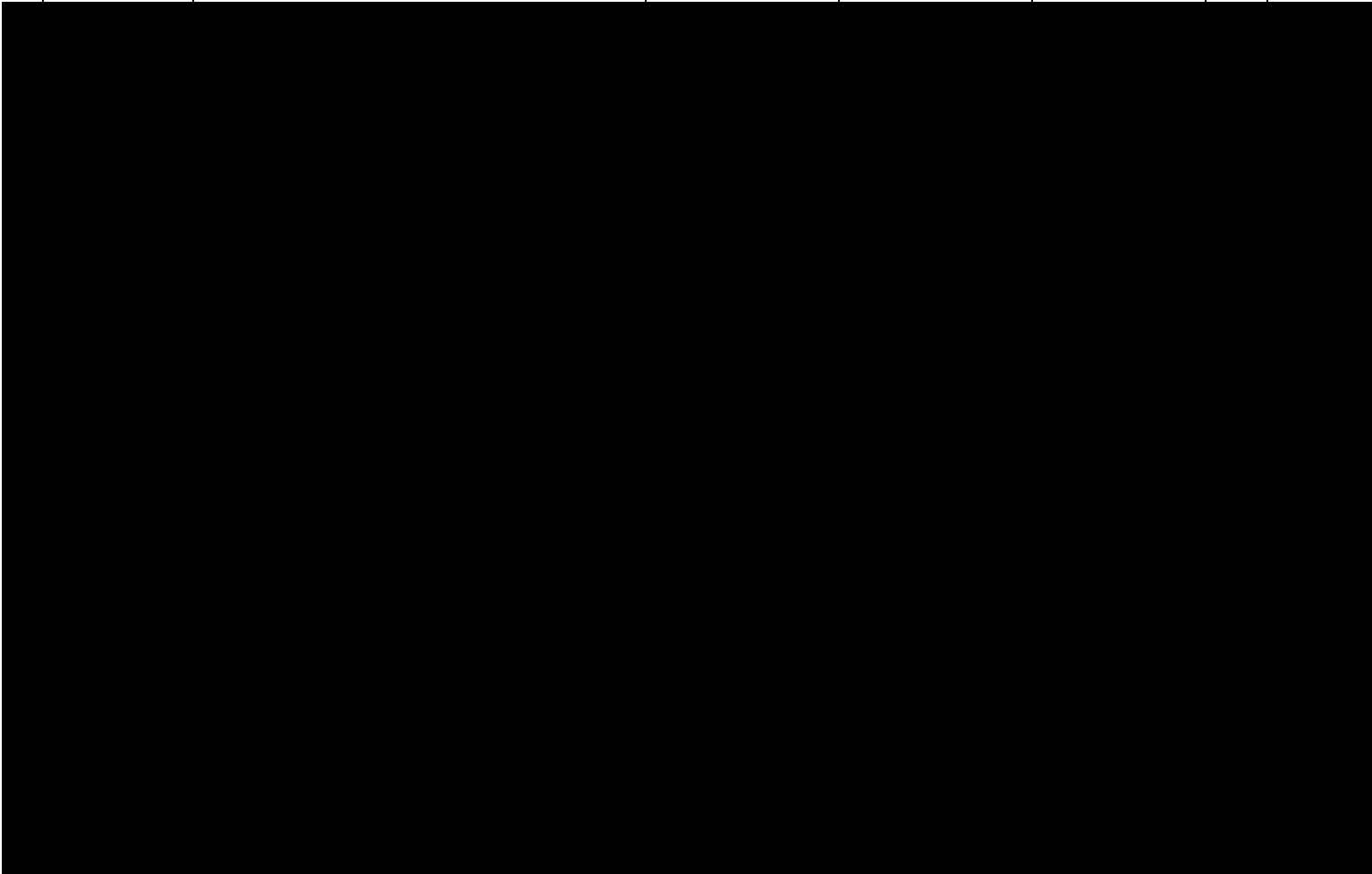
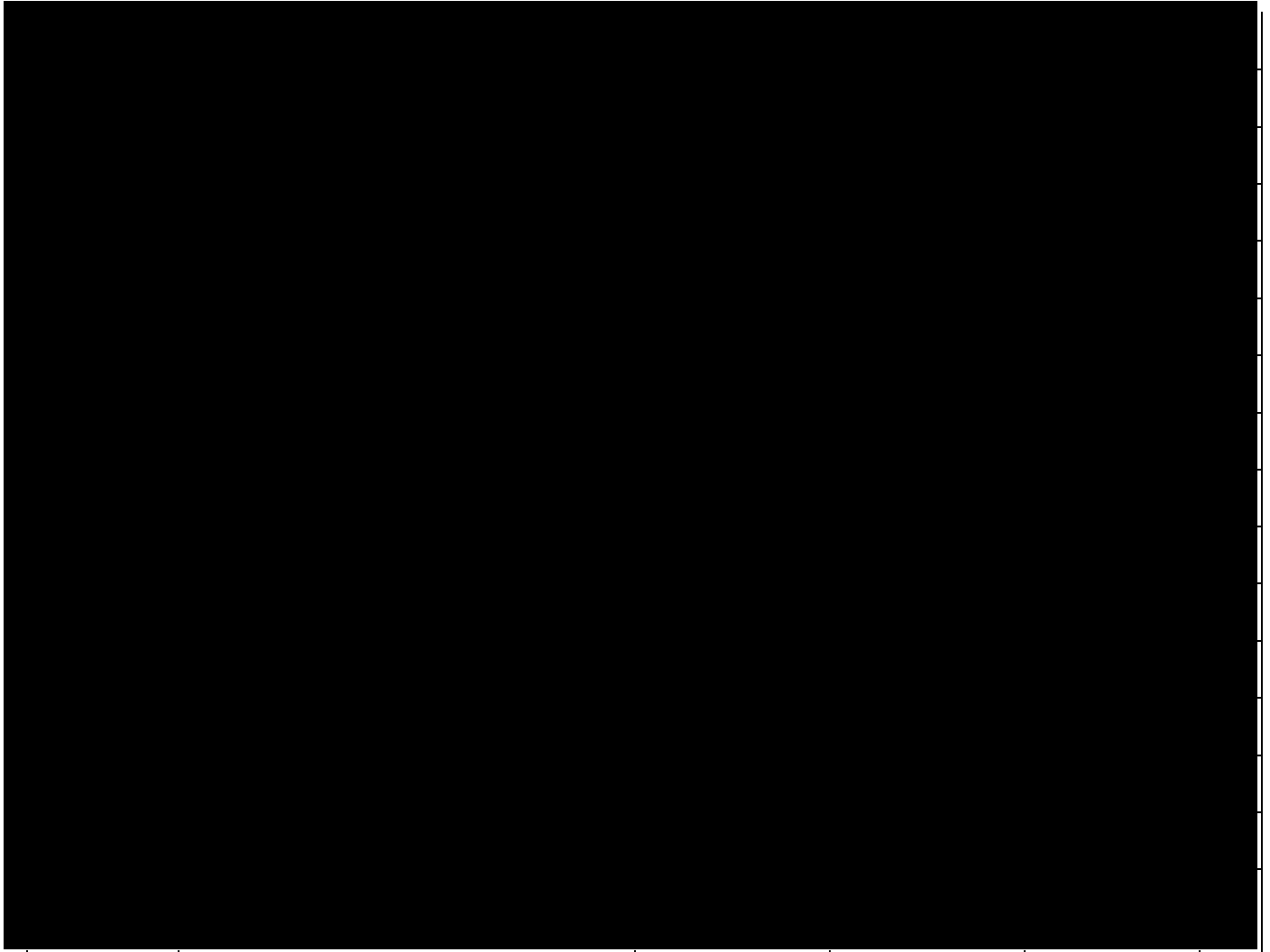




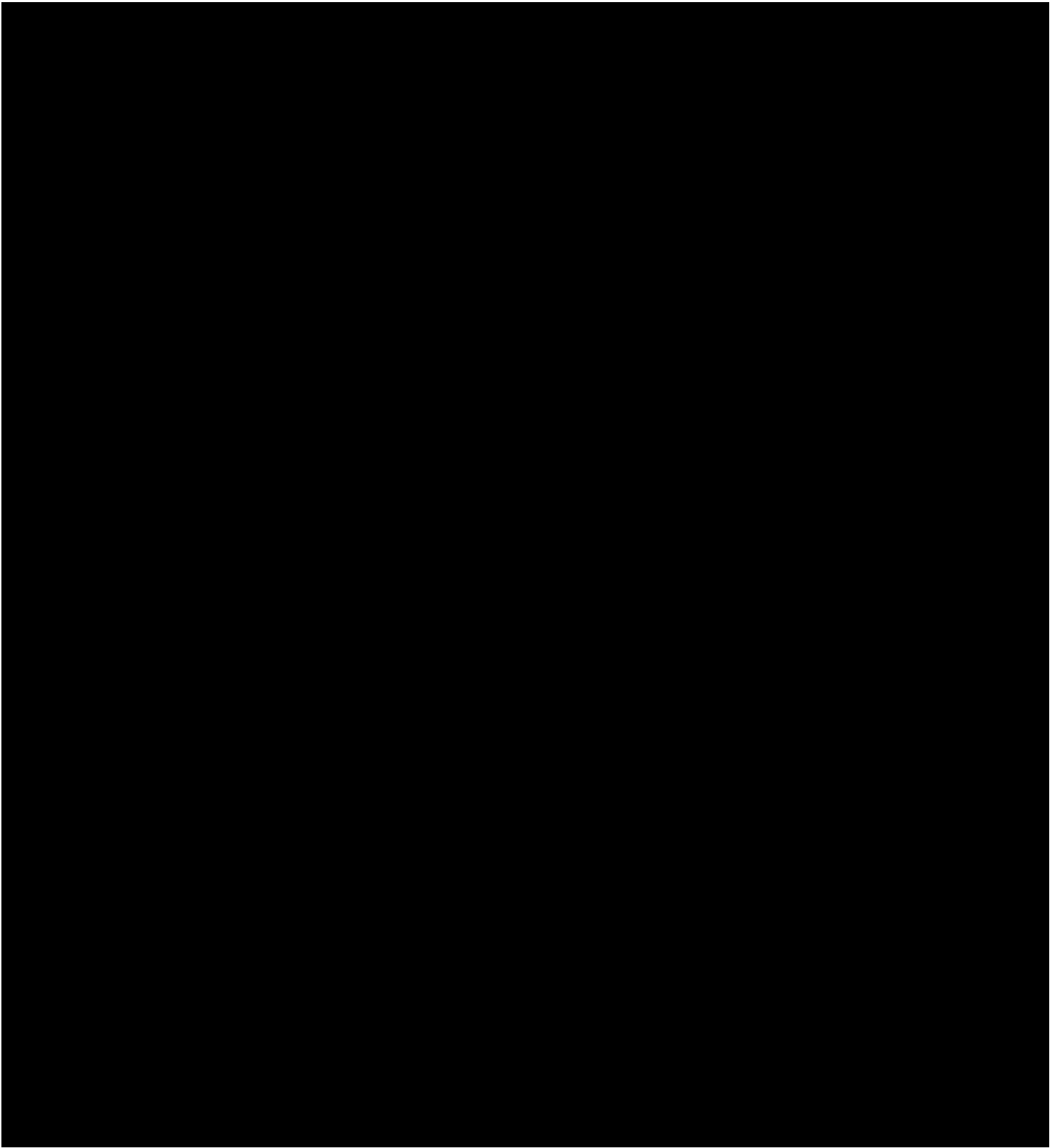


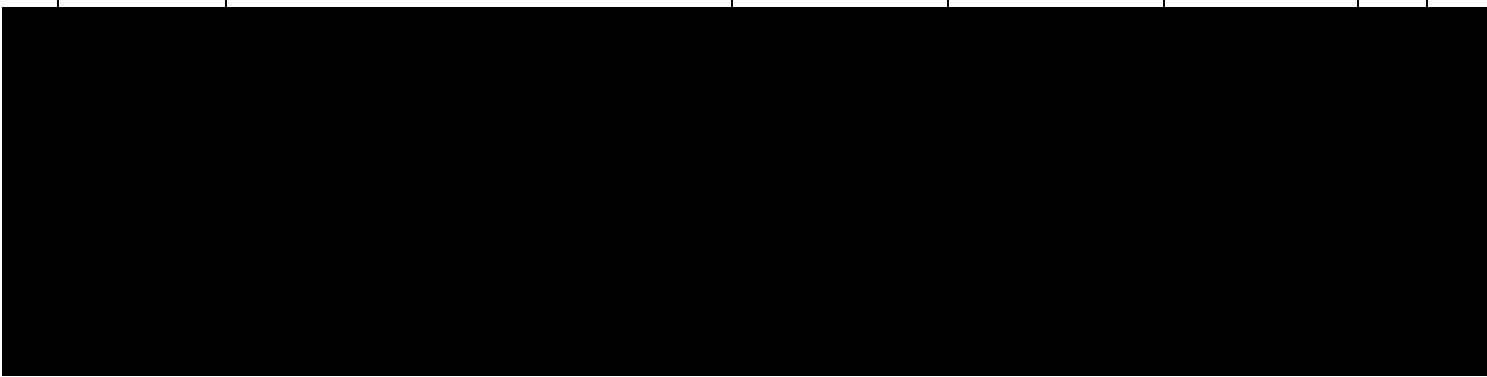
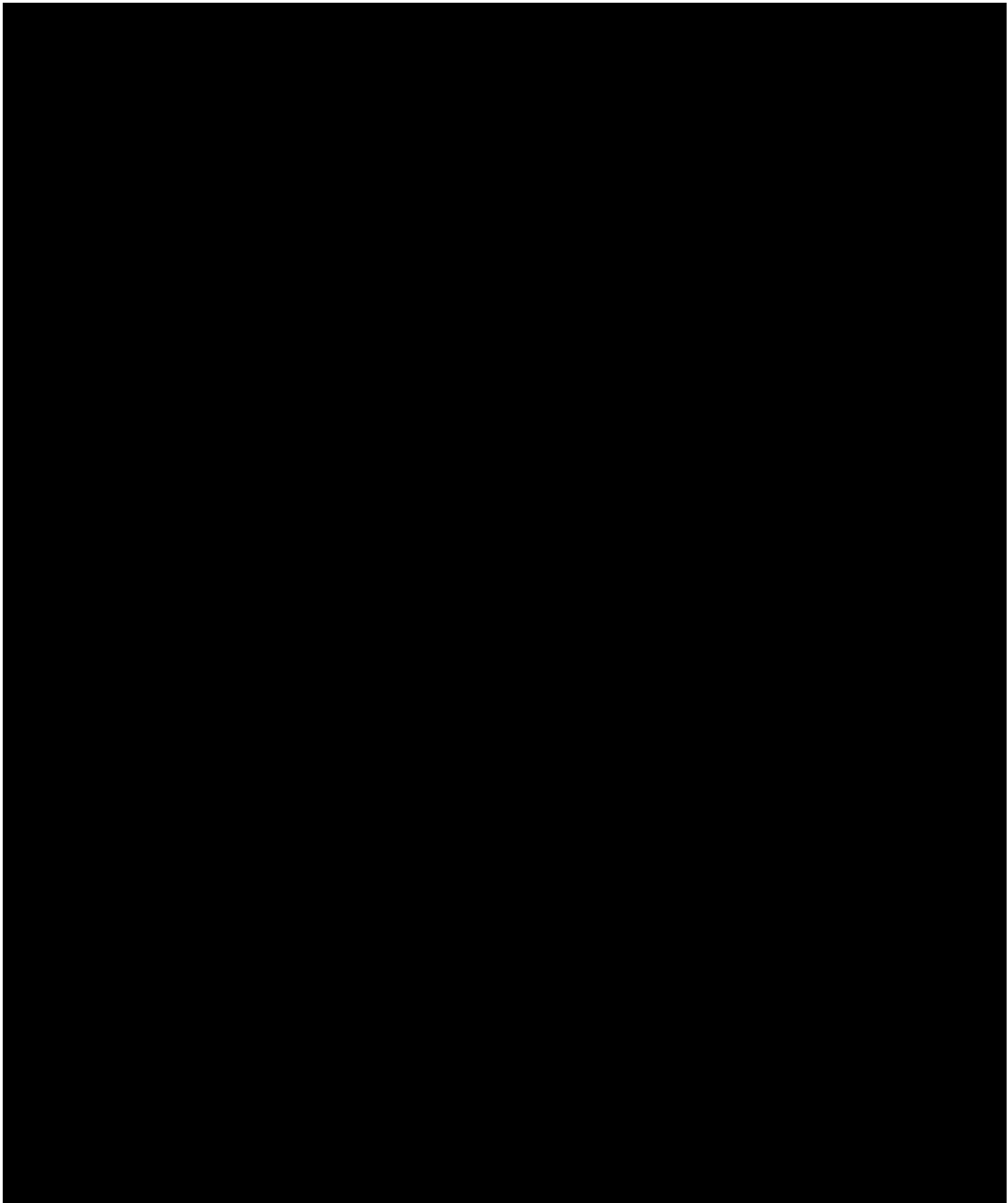












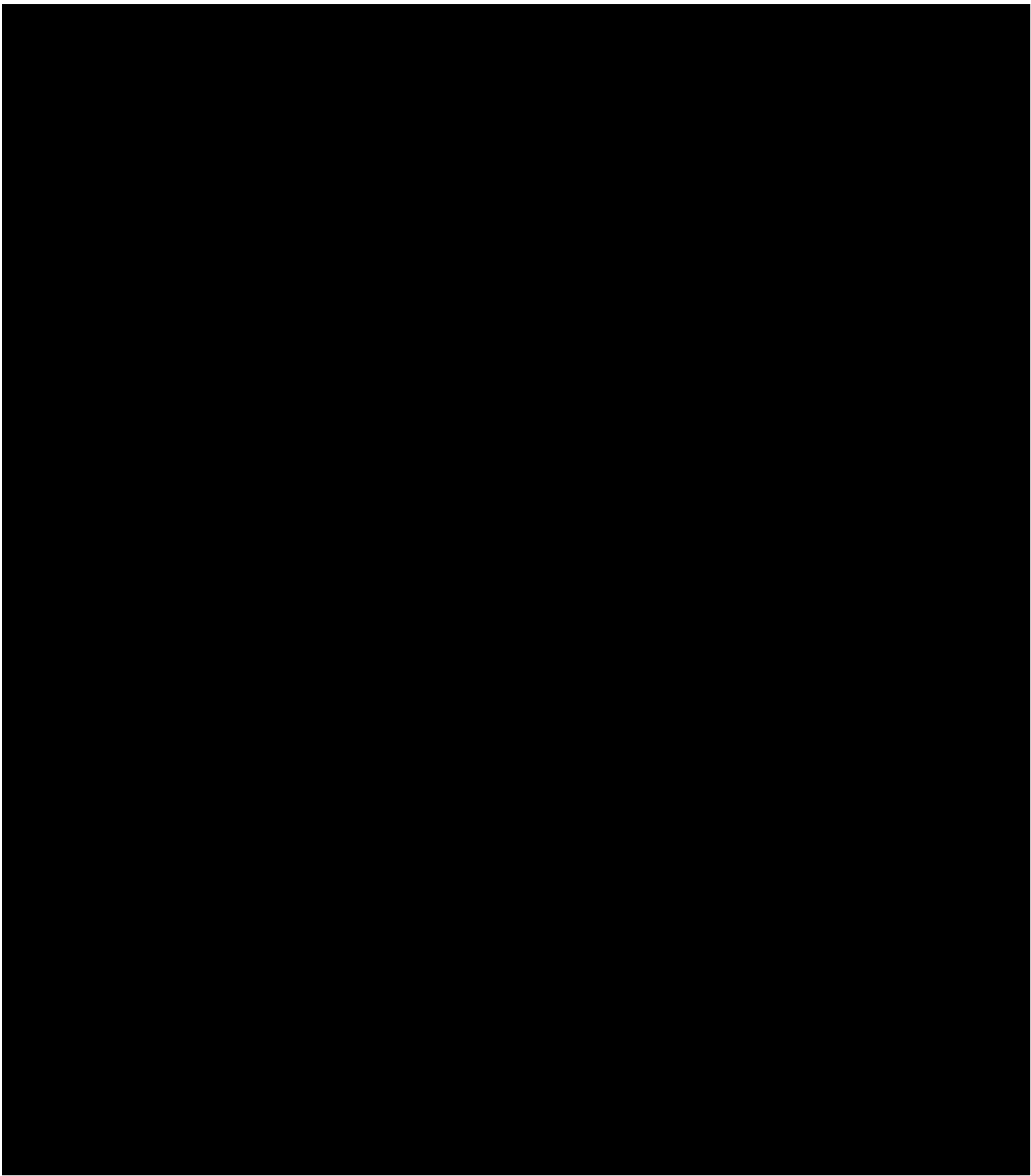








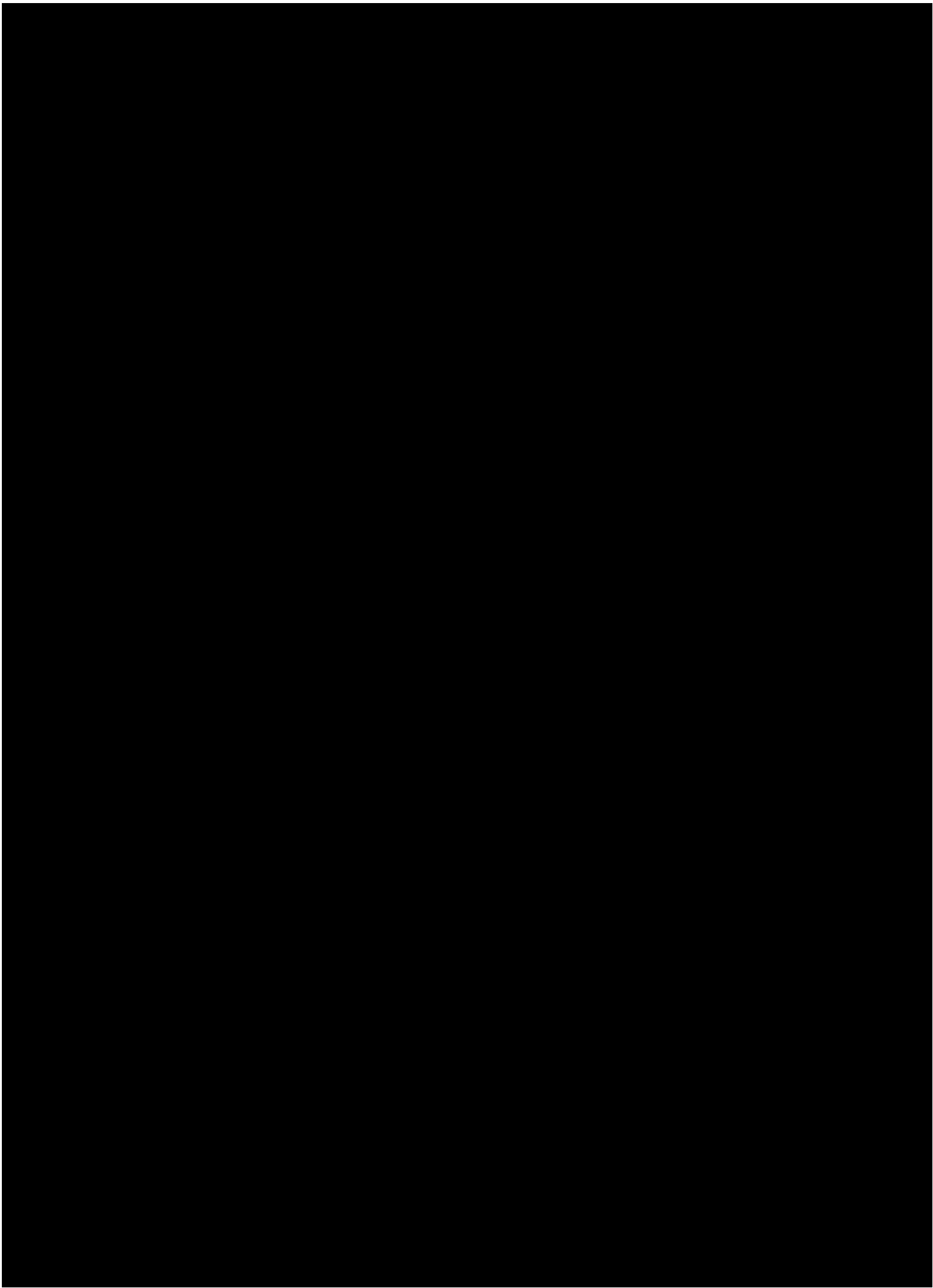


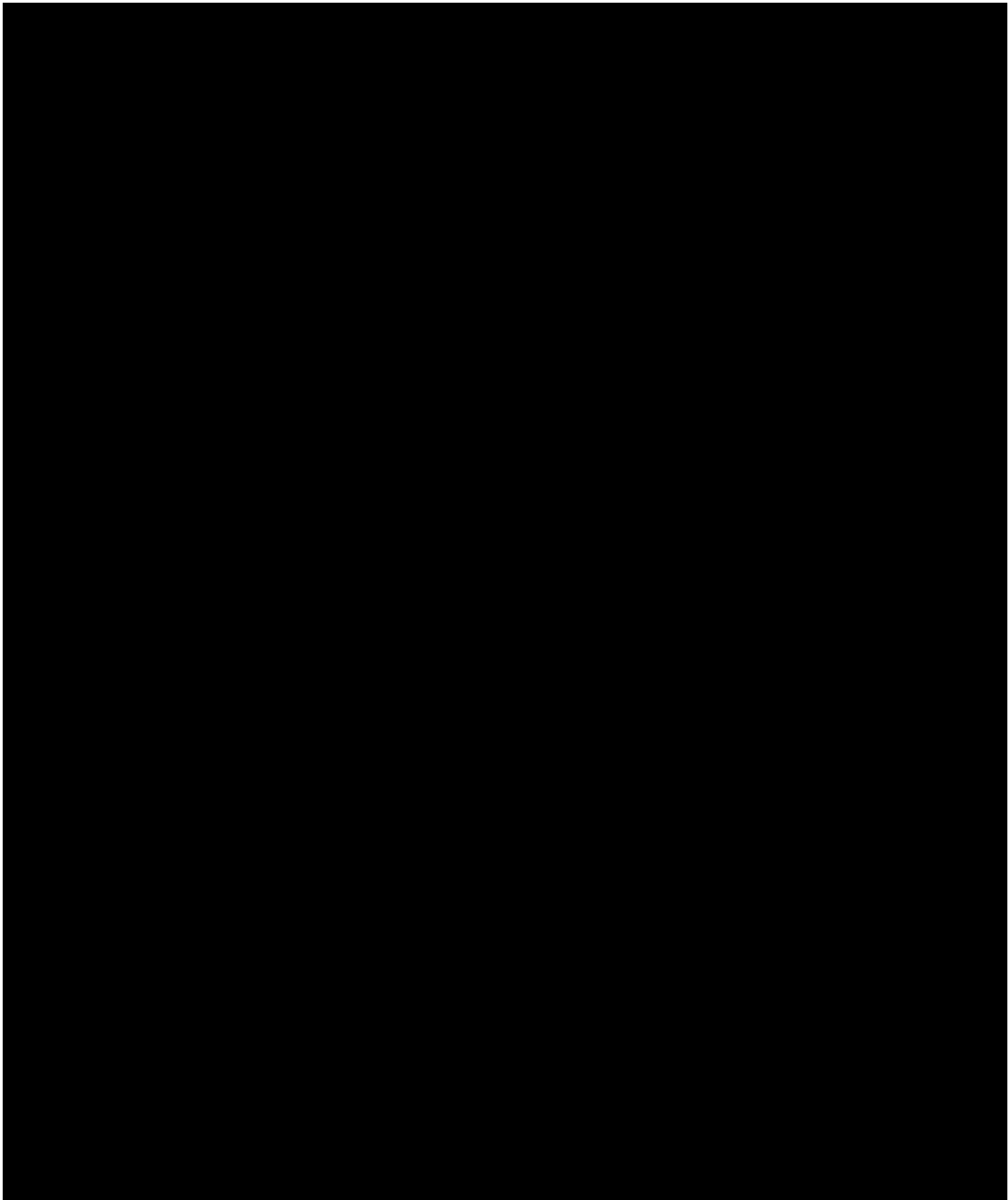


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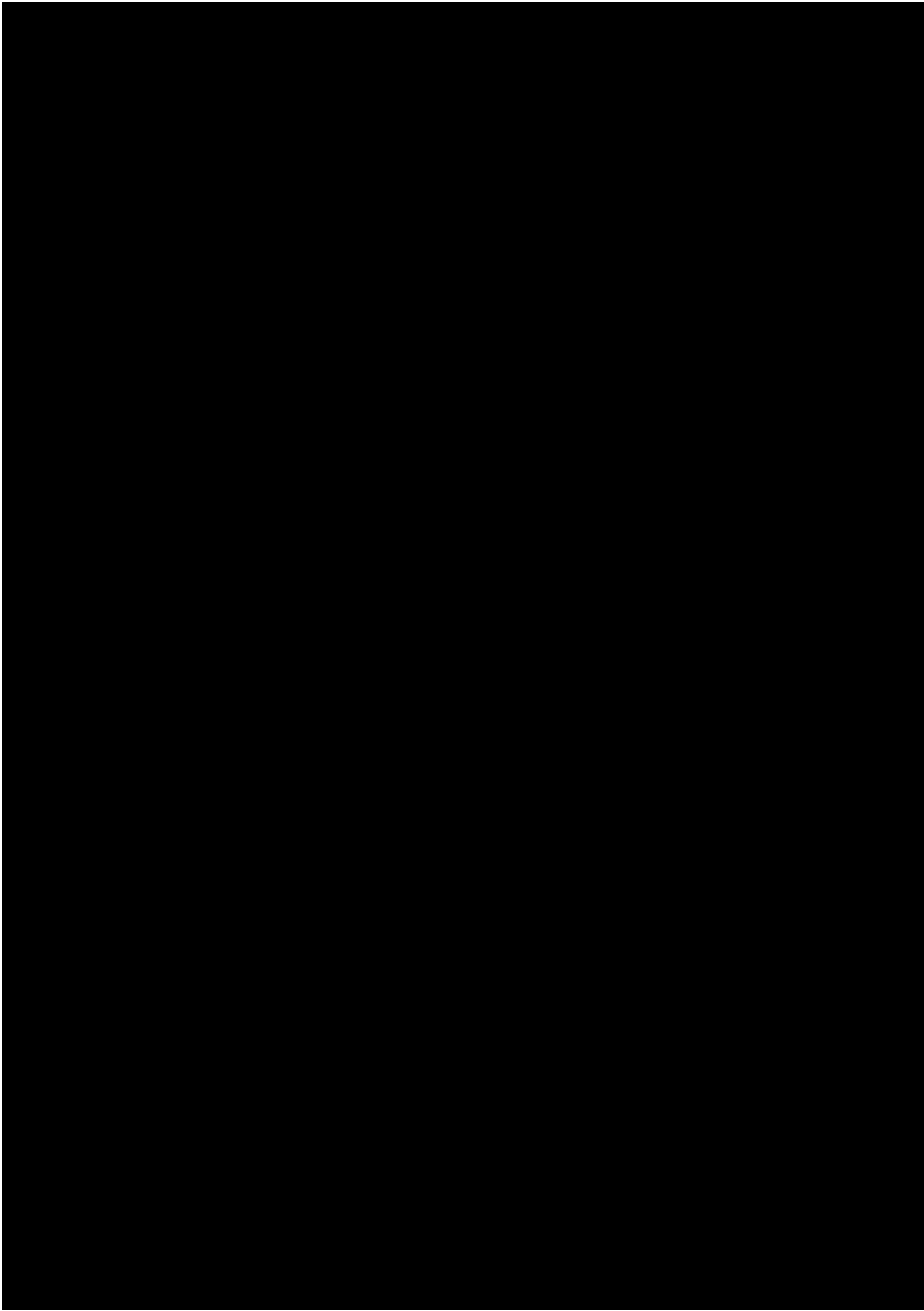


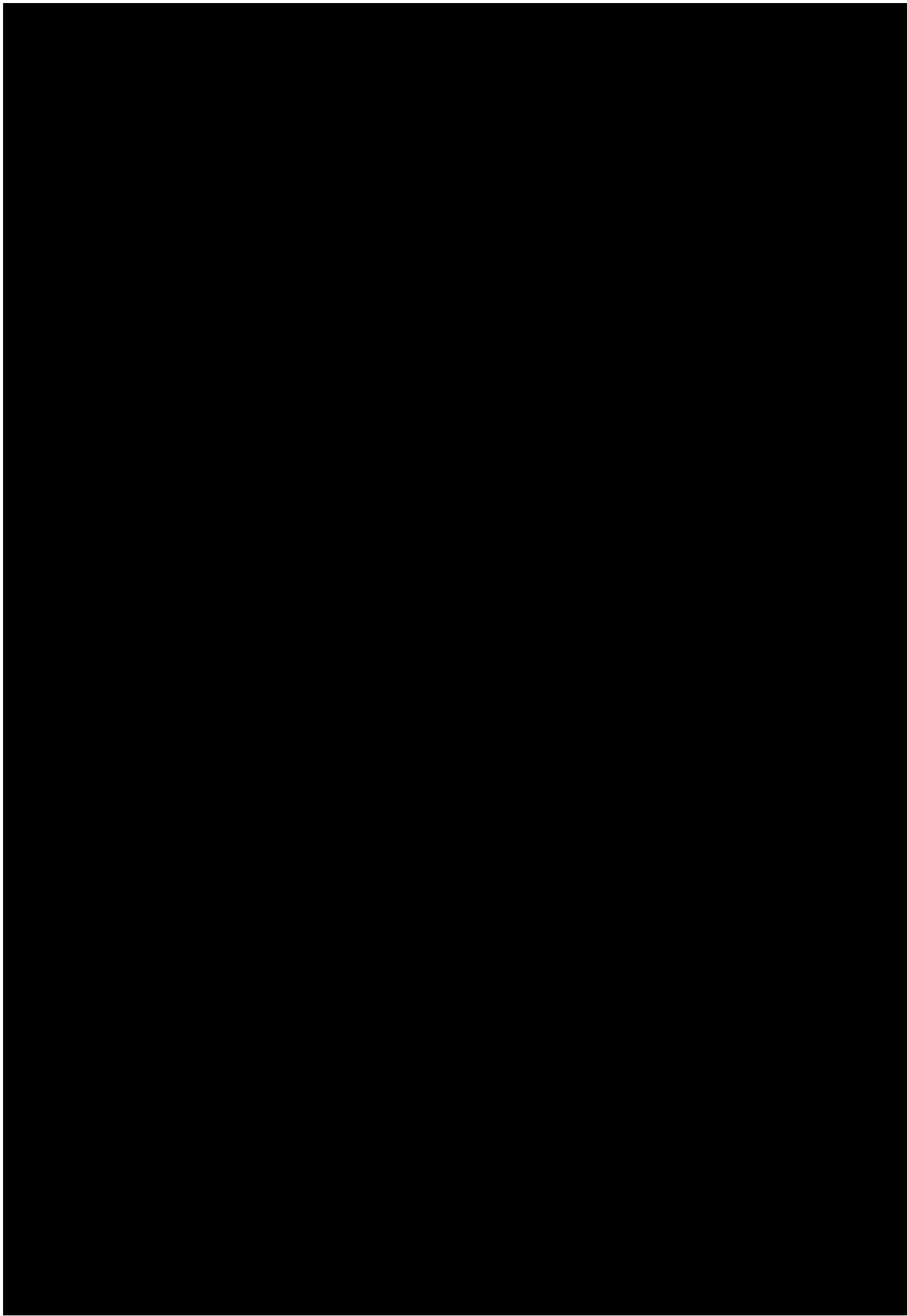


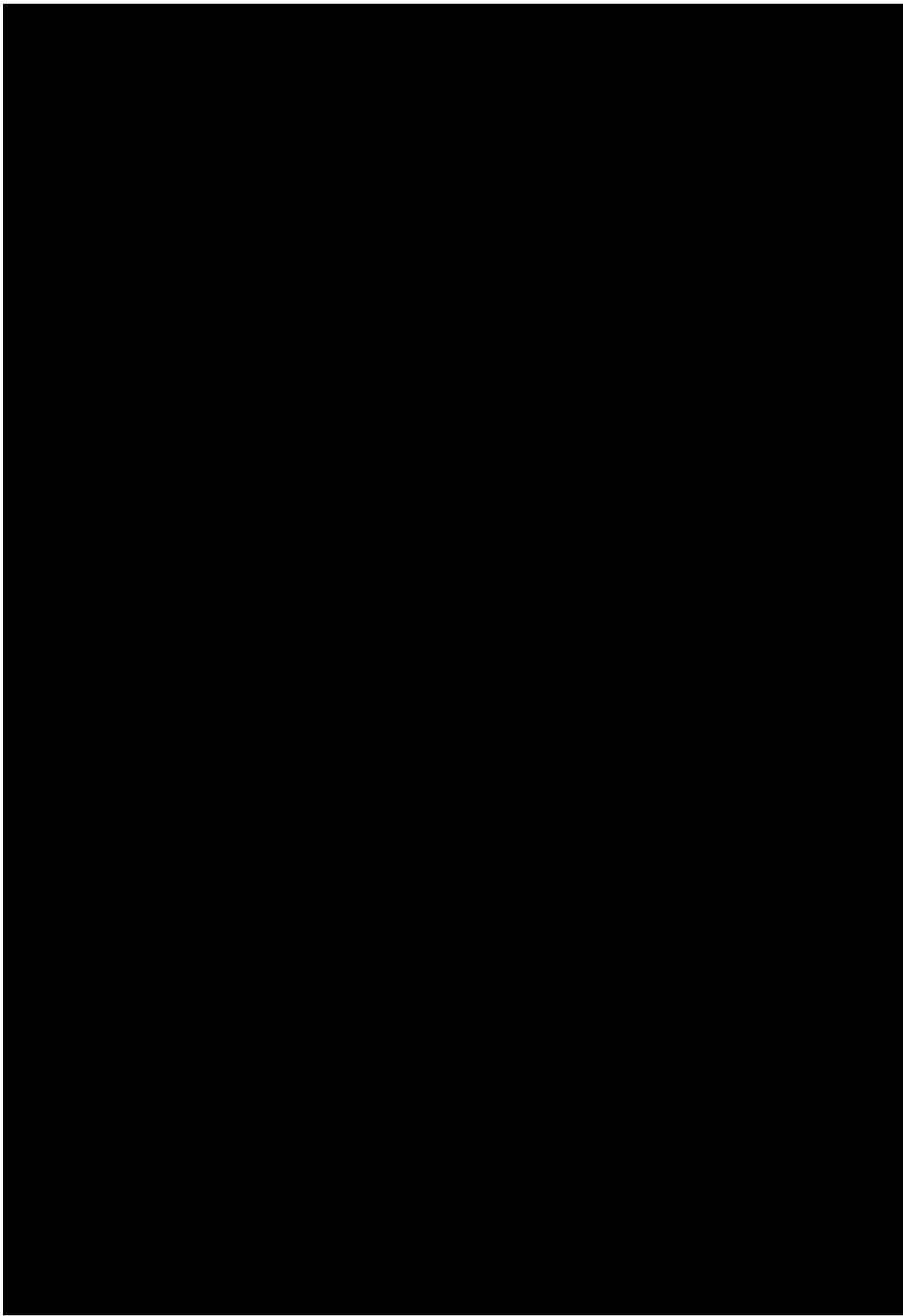


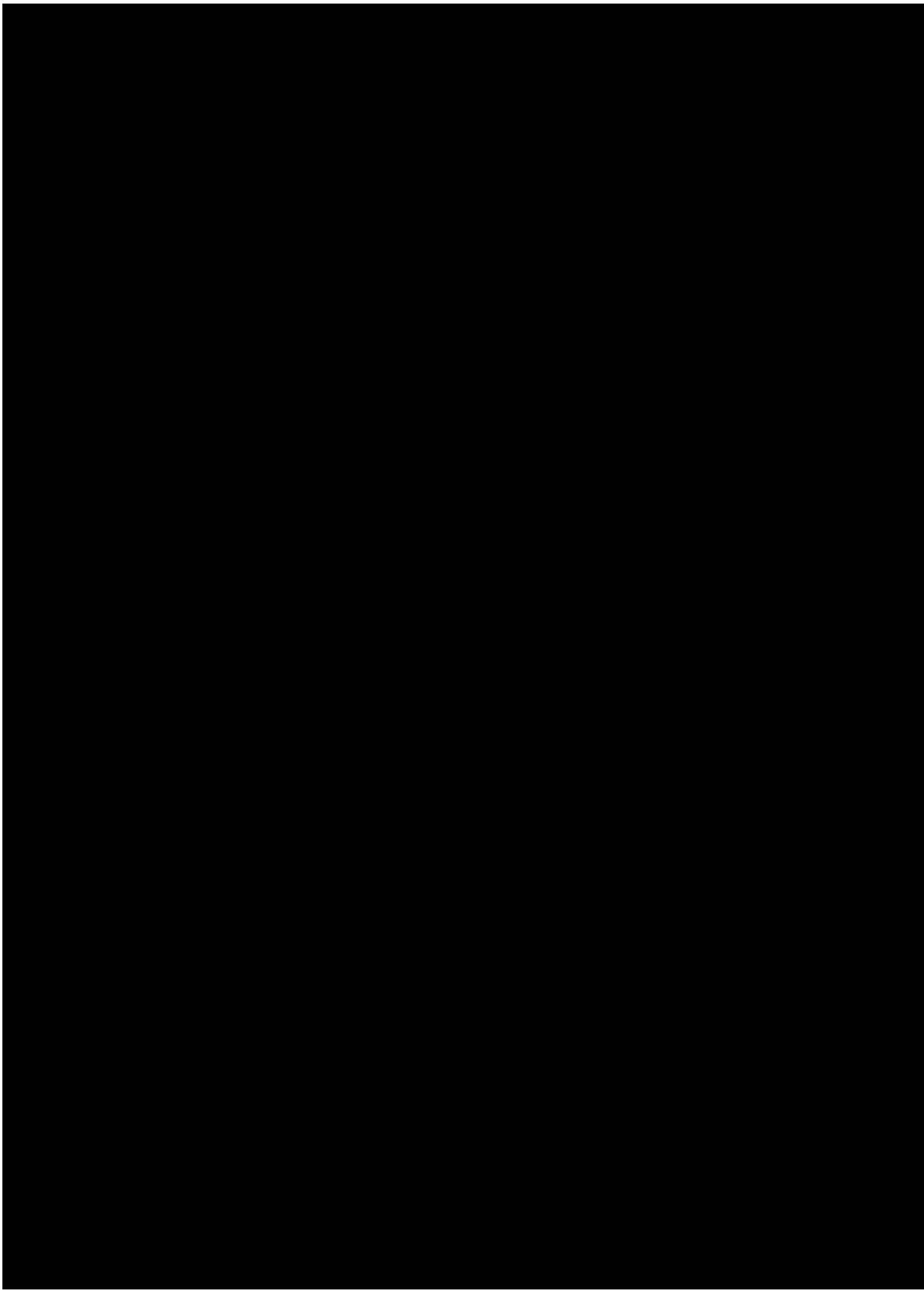


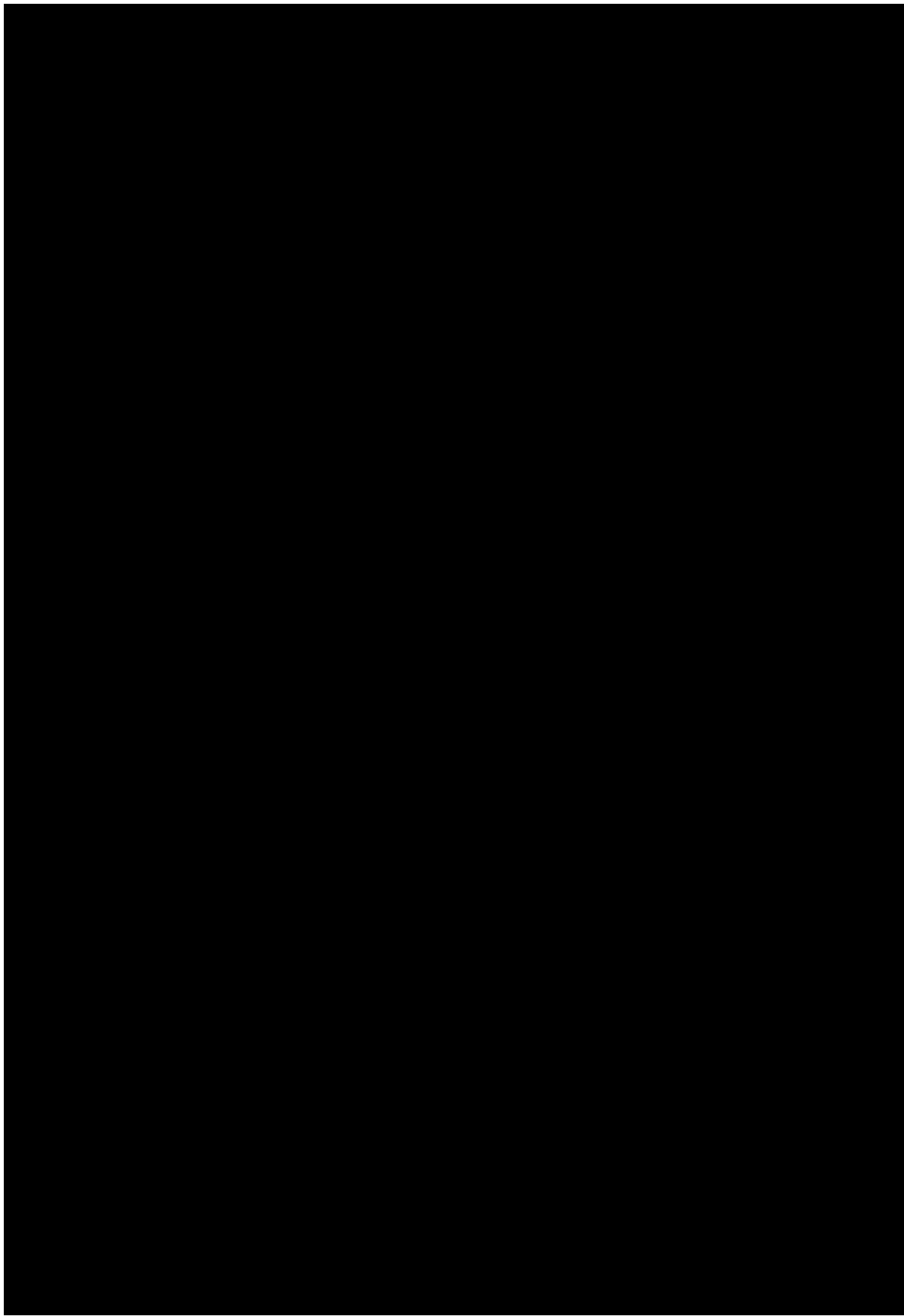
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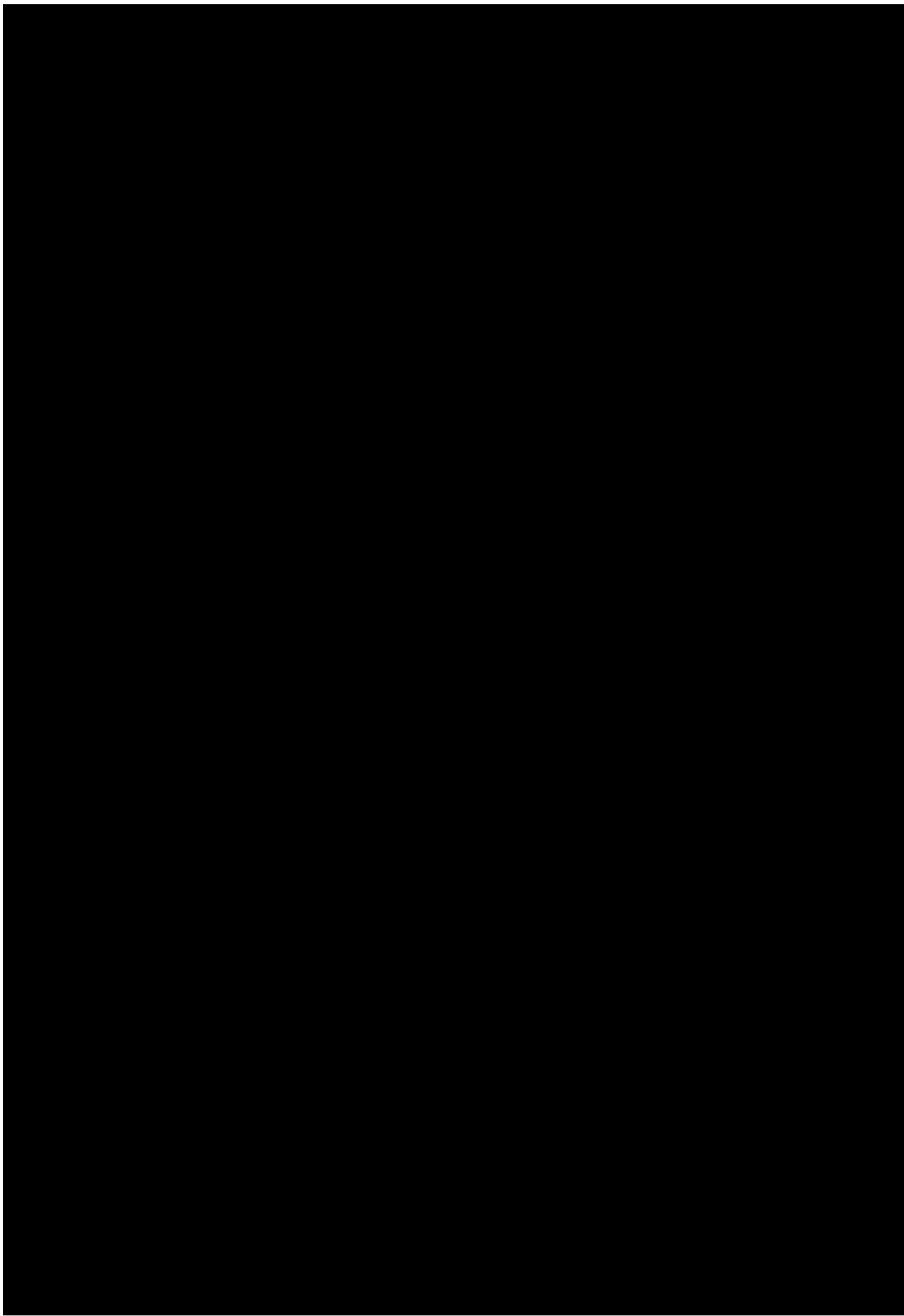














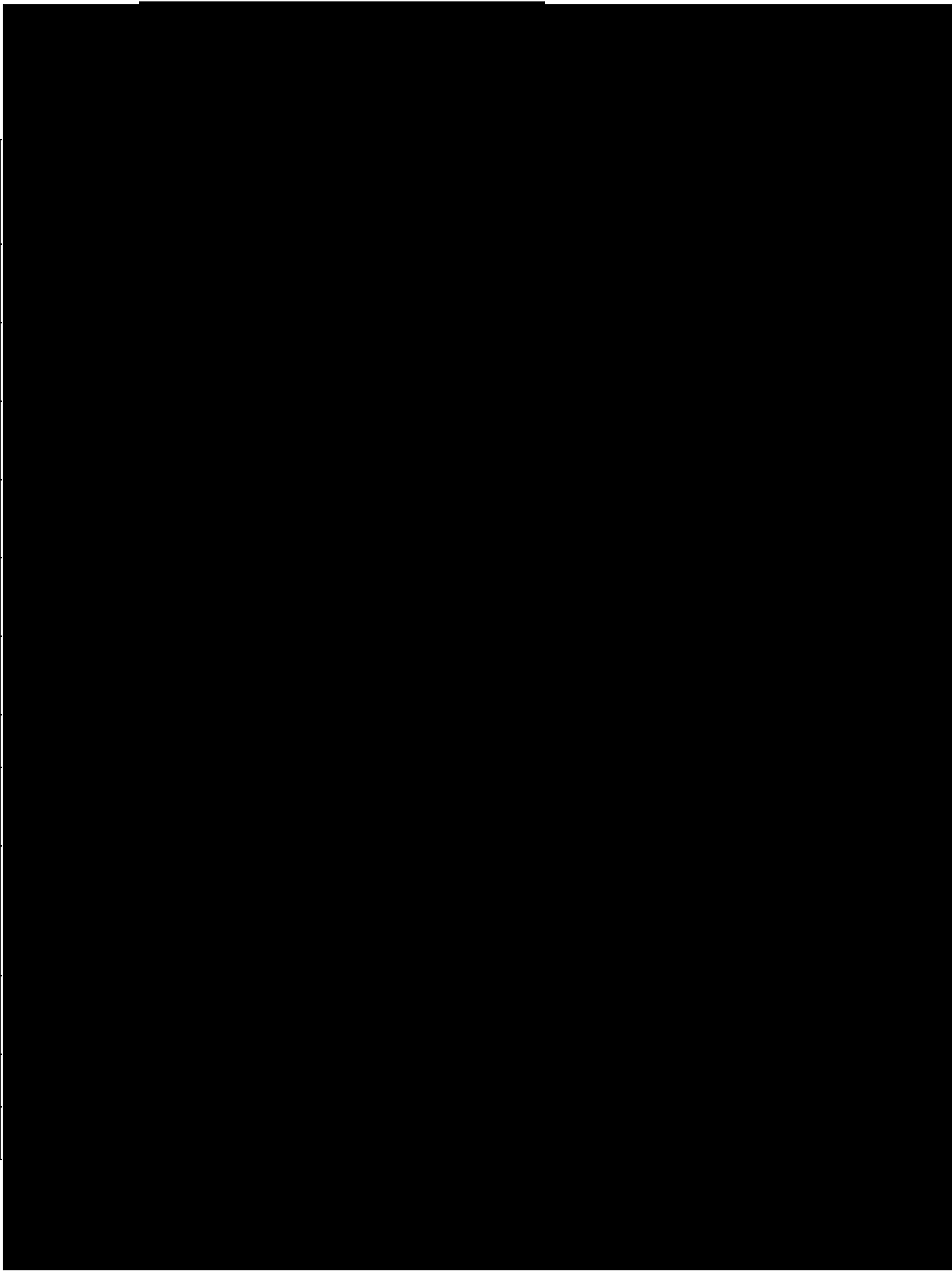






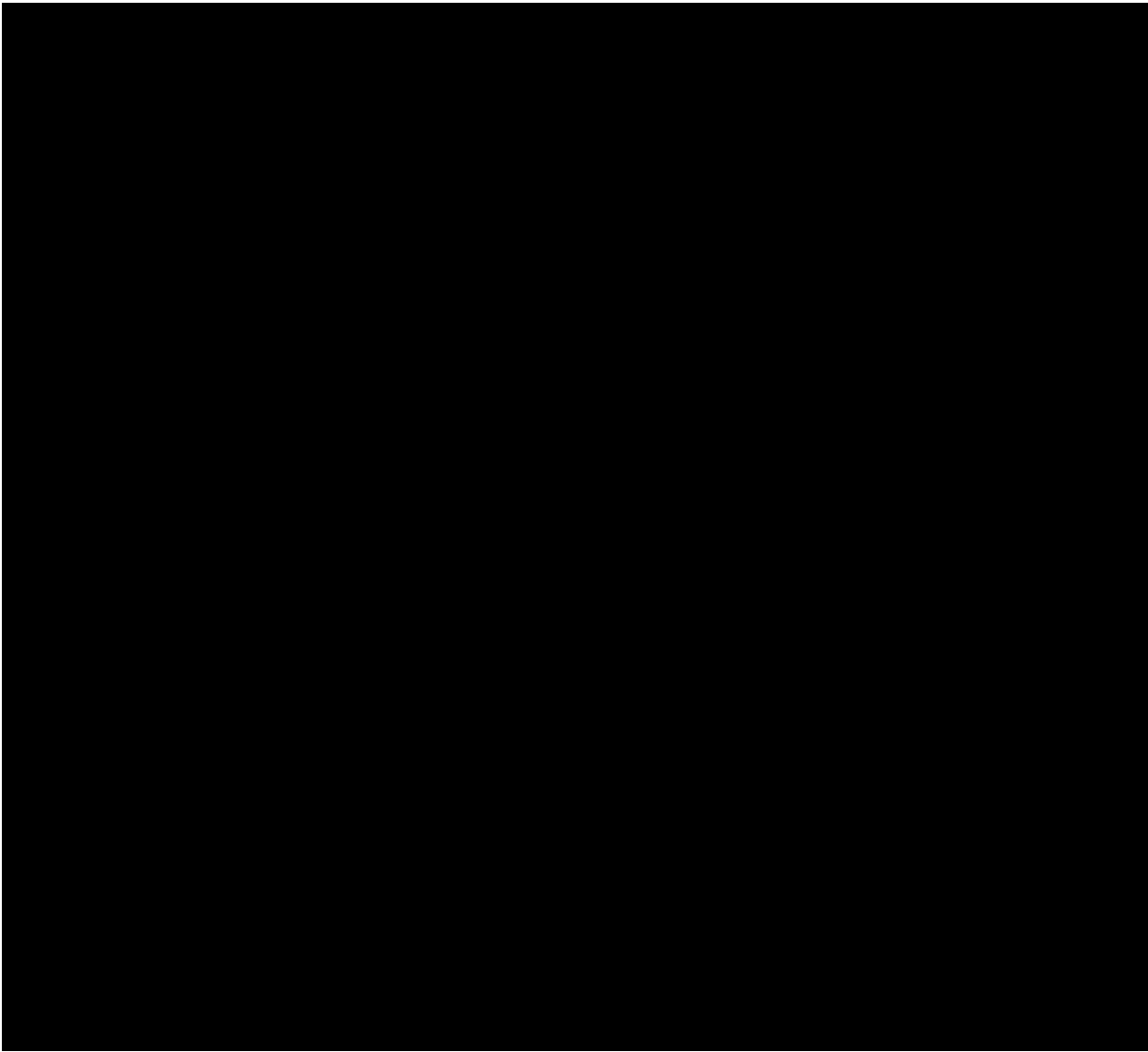


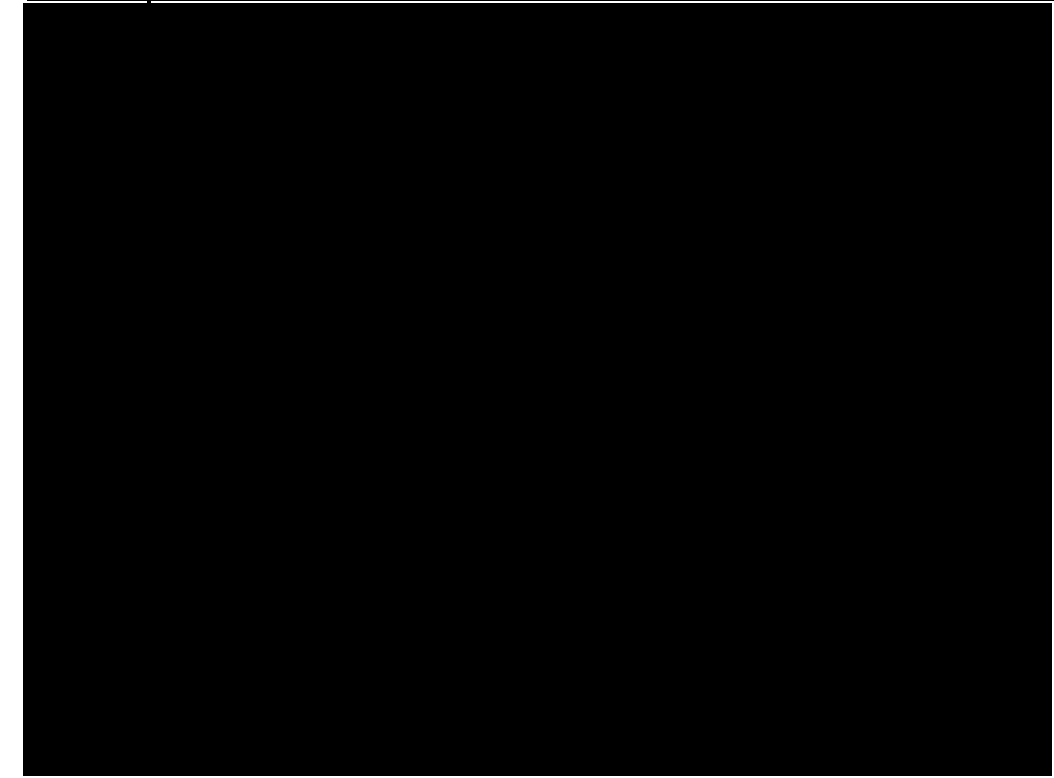
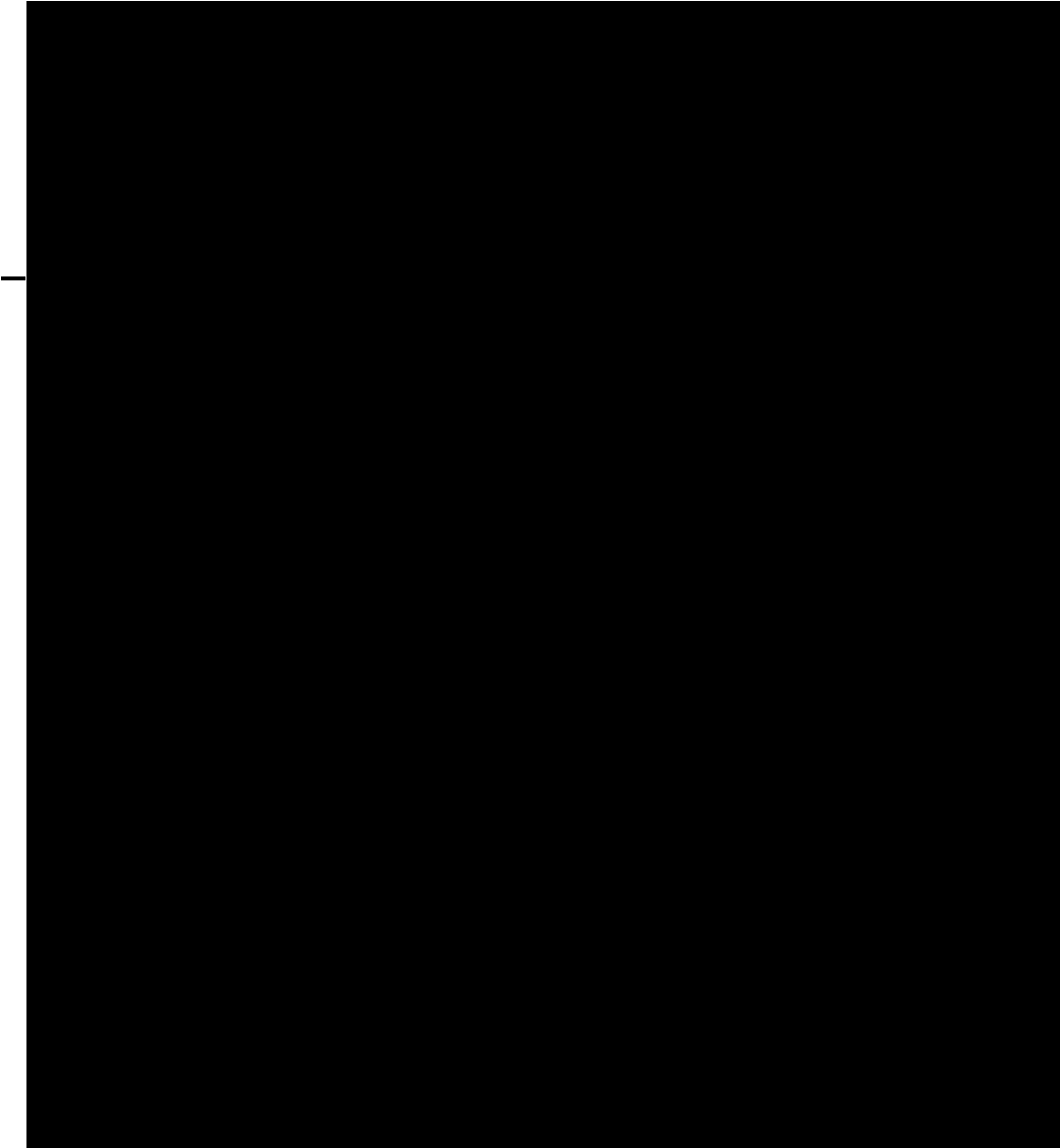






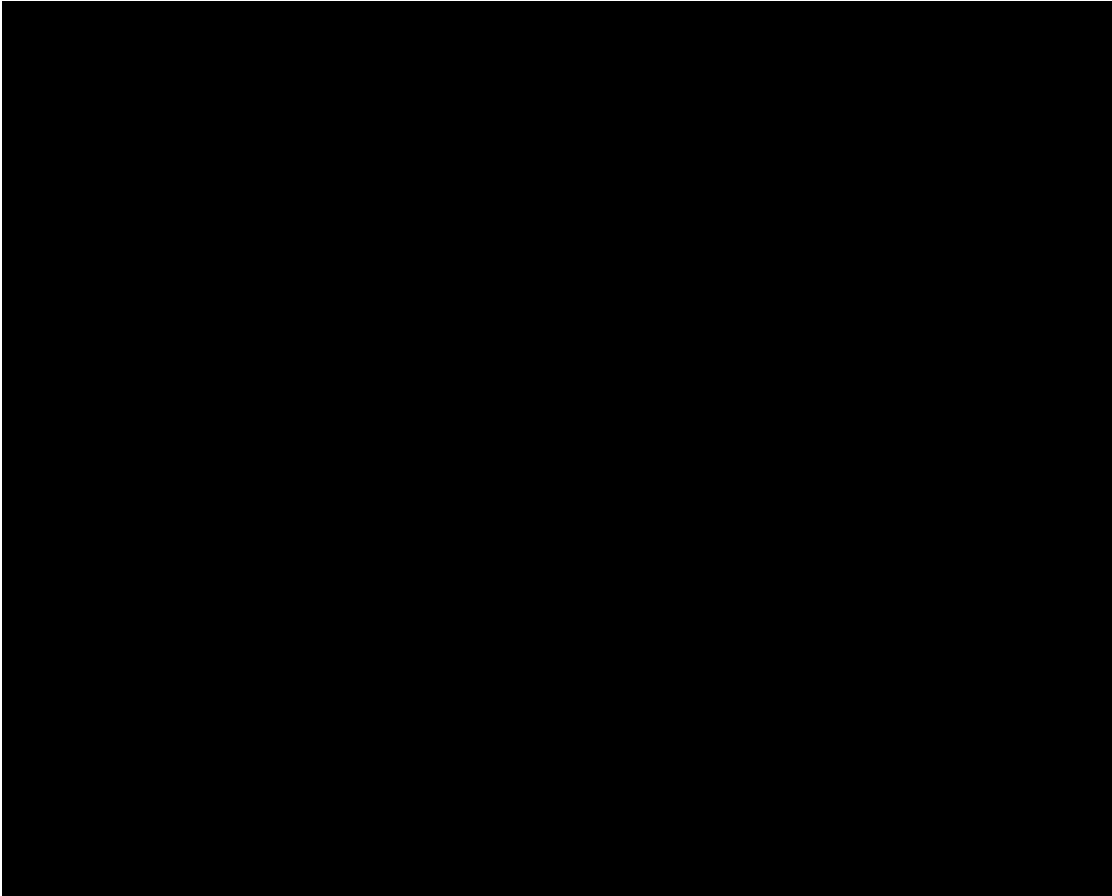
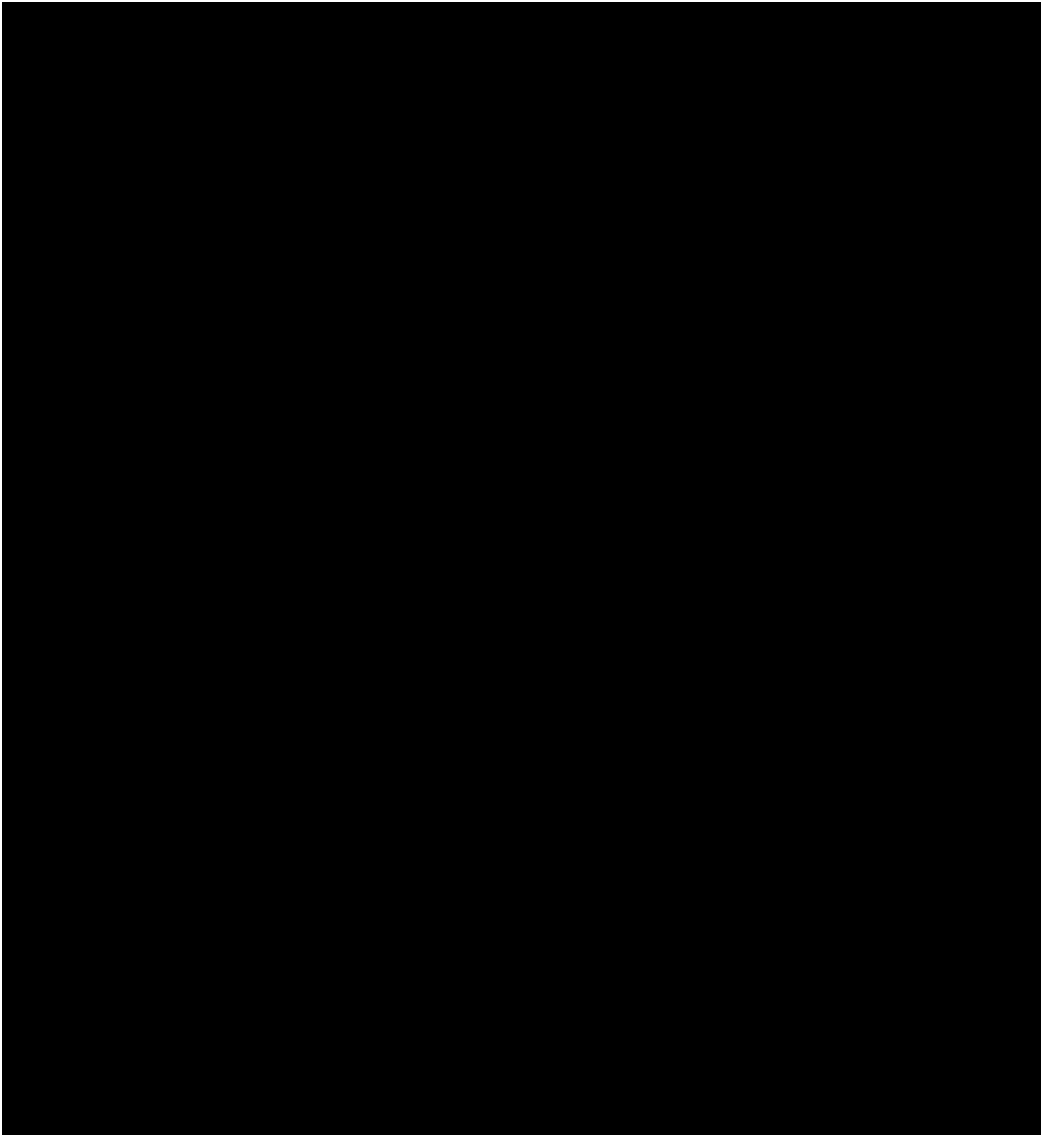










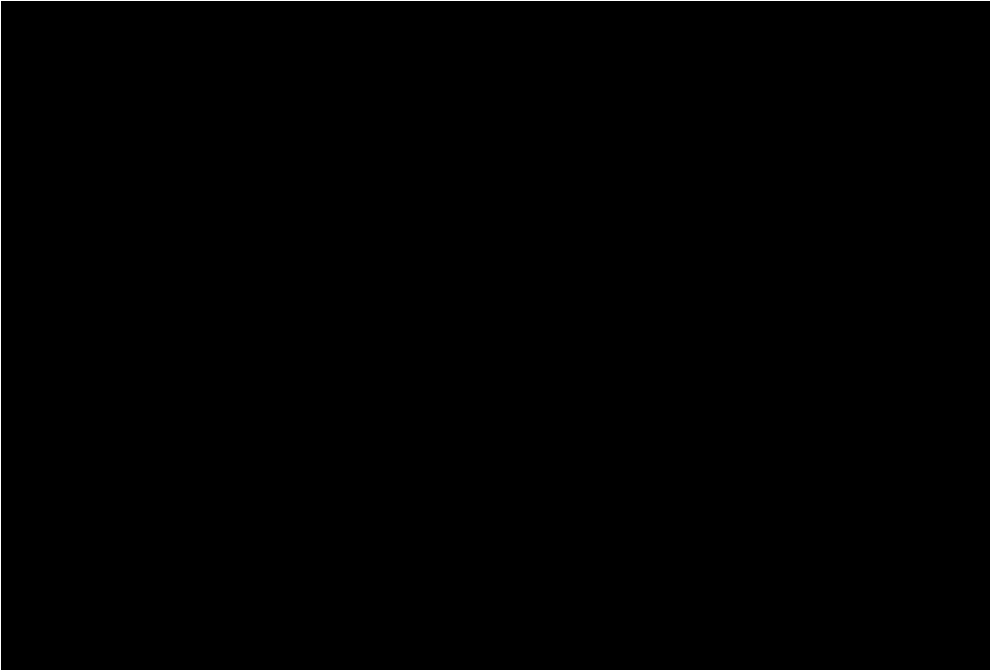
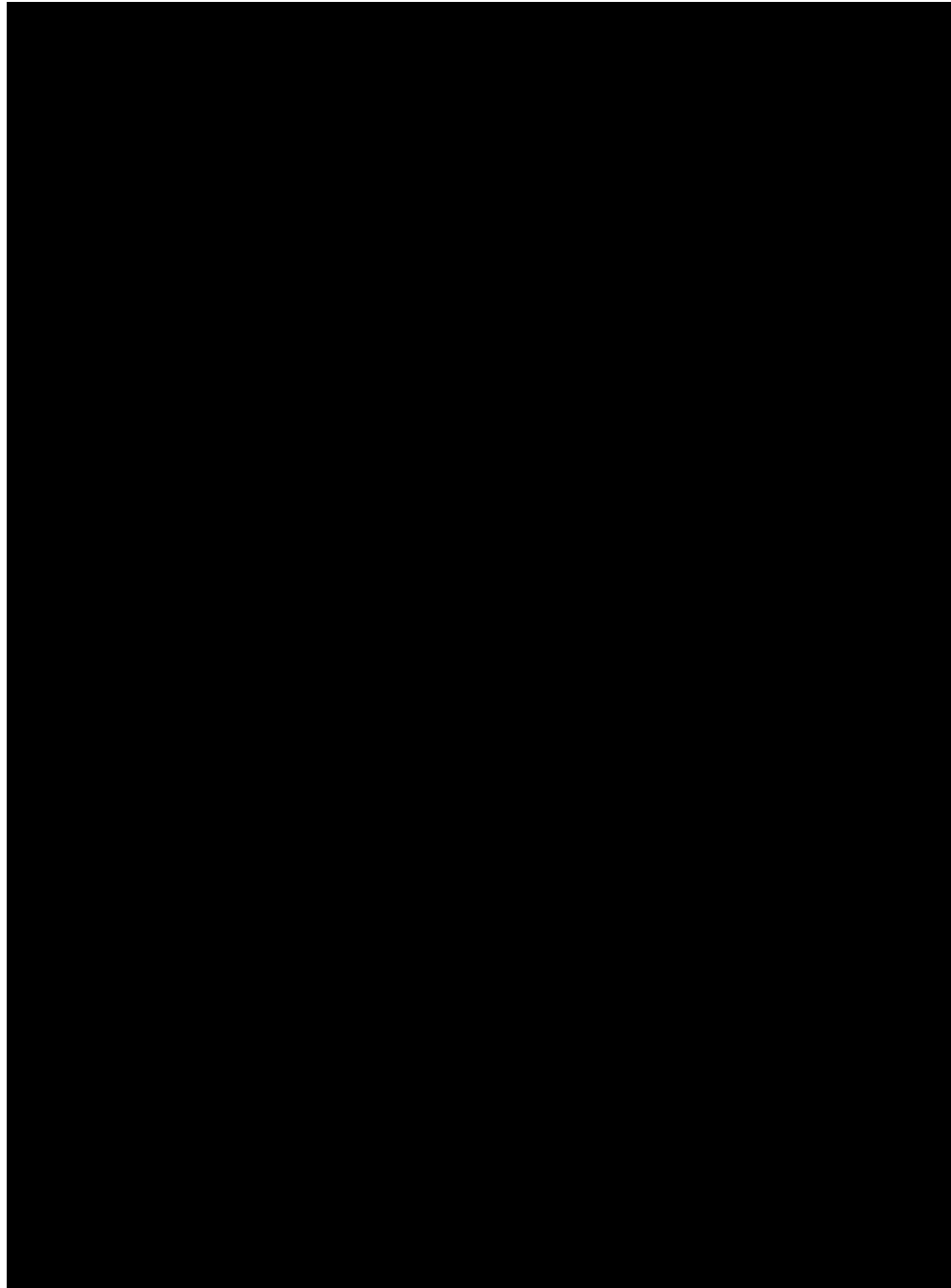


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[REDACTED]

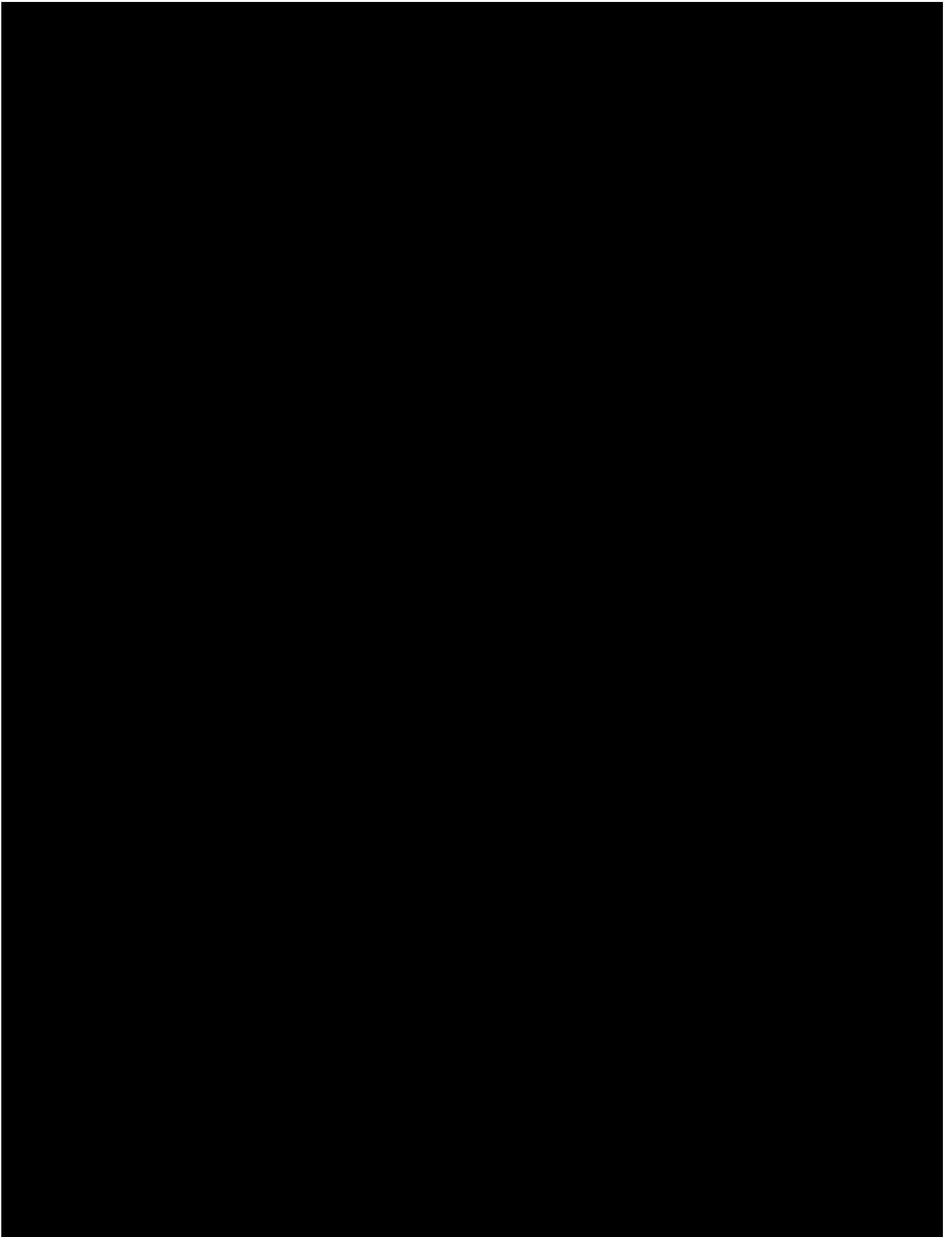
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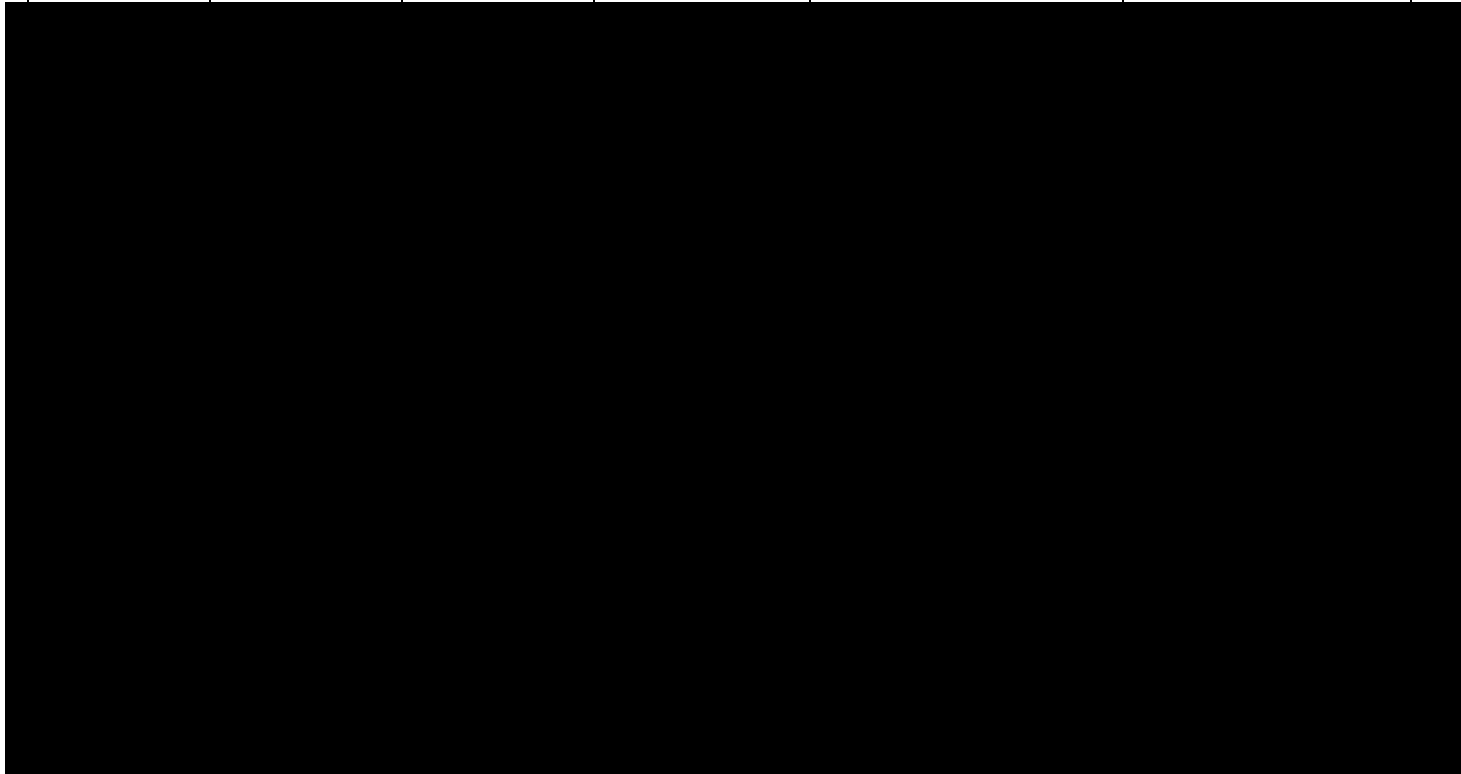
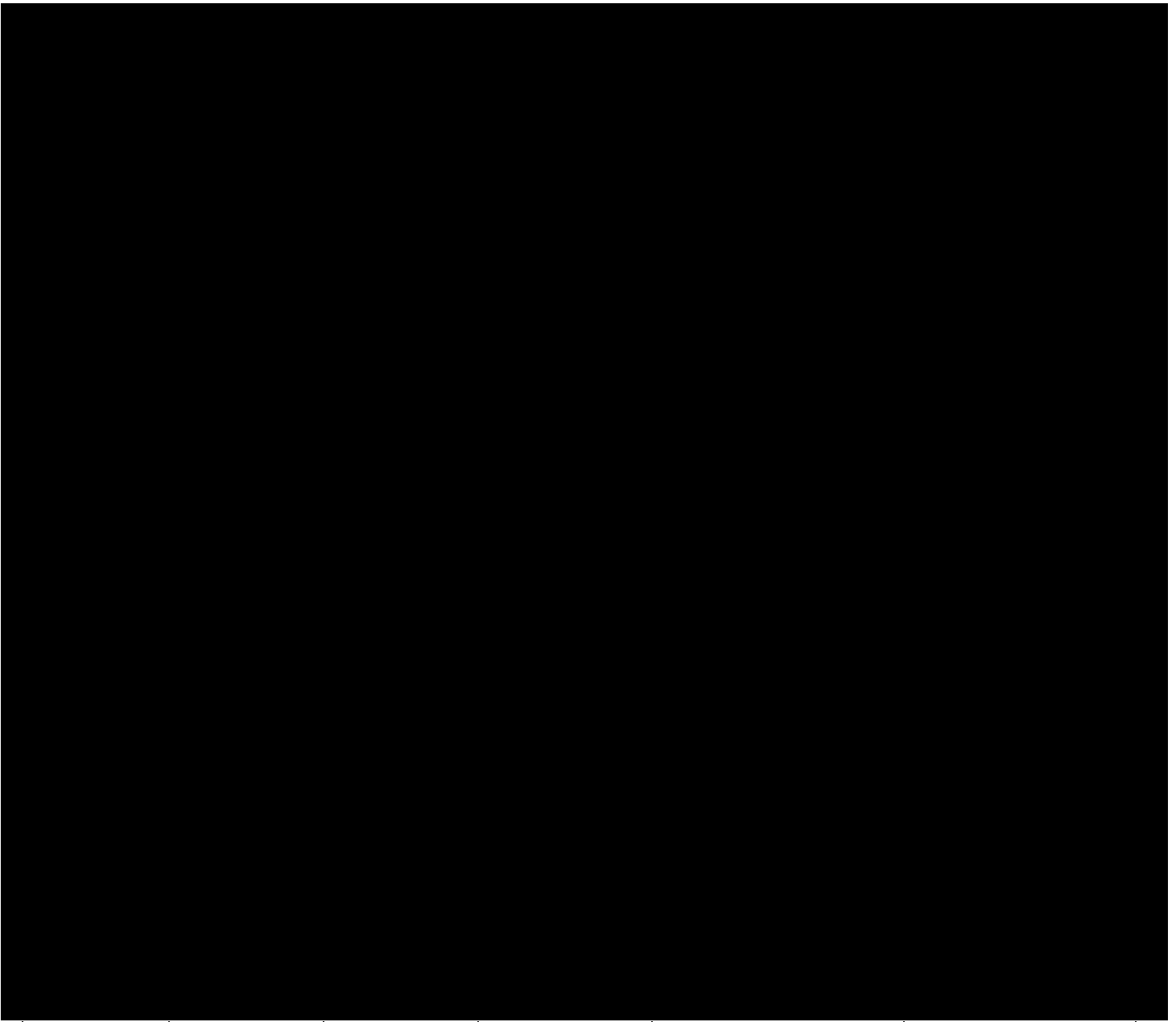
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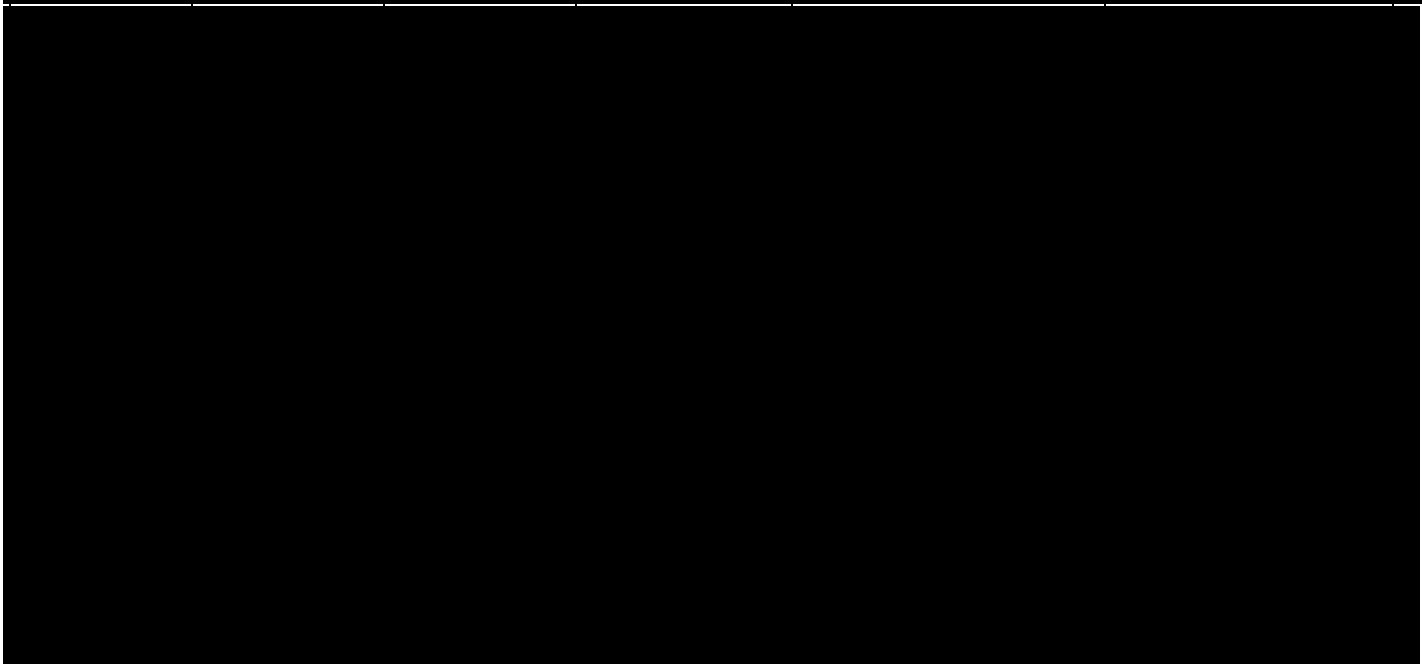
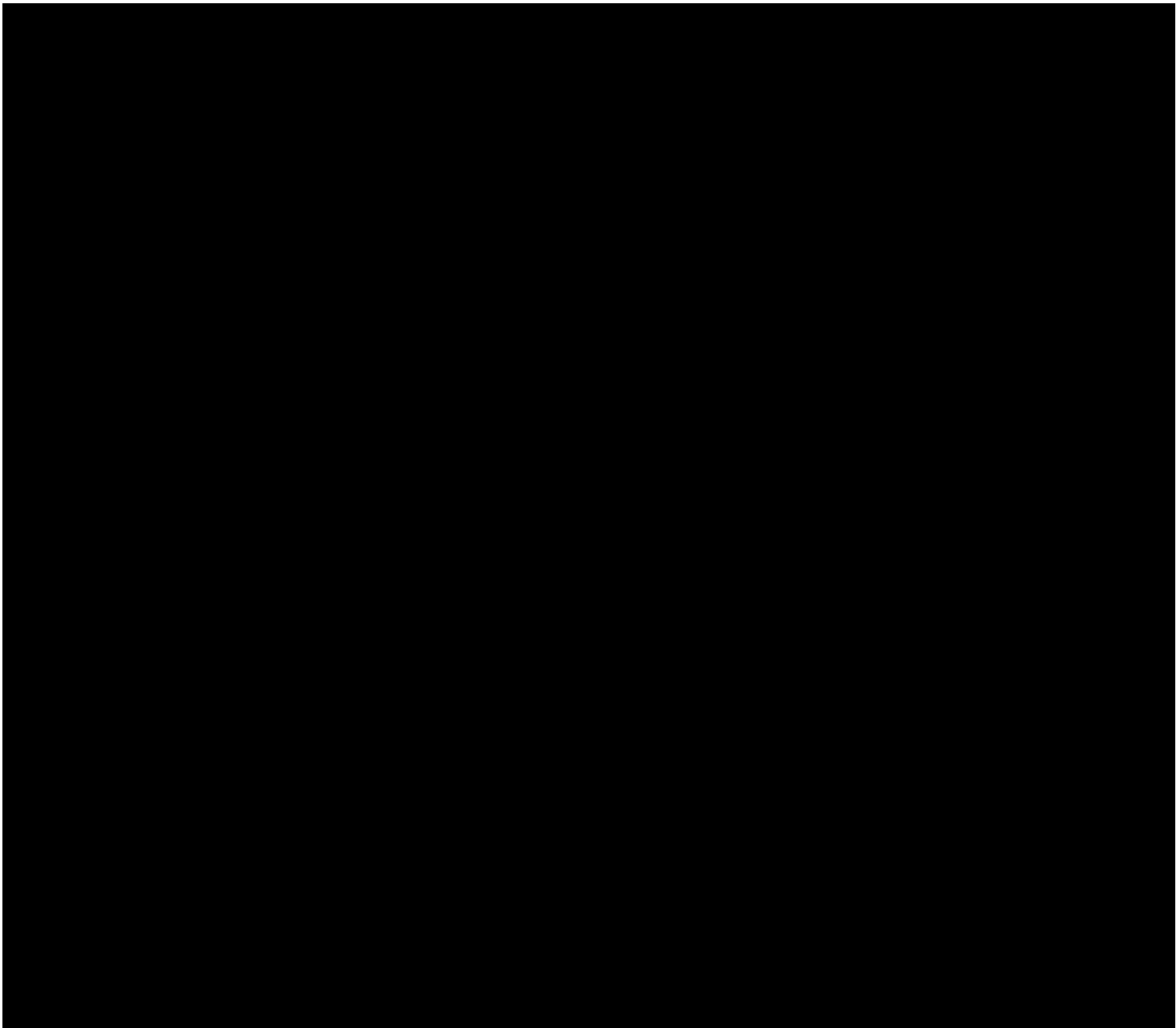


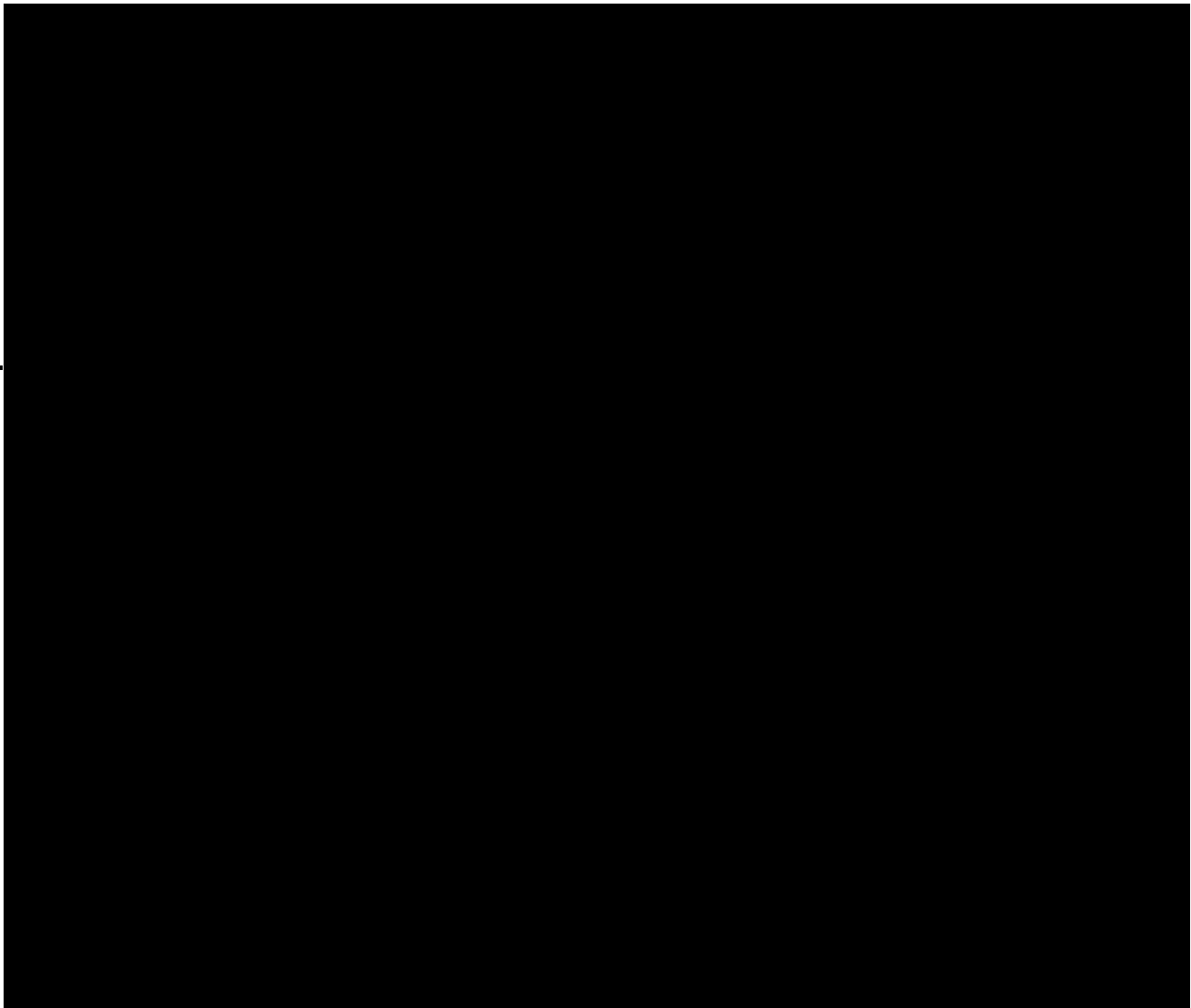


[REDACTED]









█ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

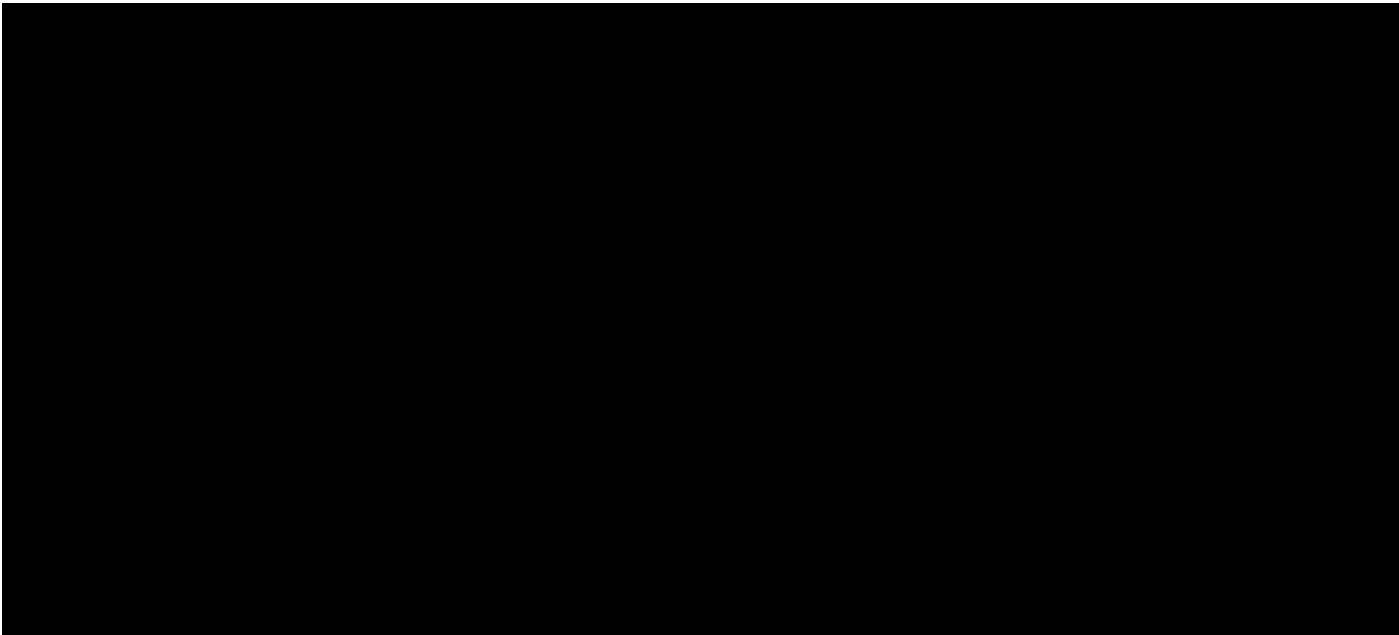
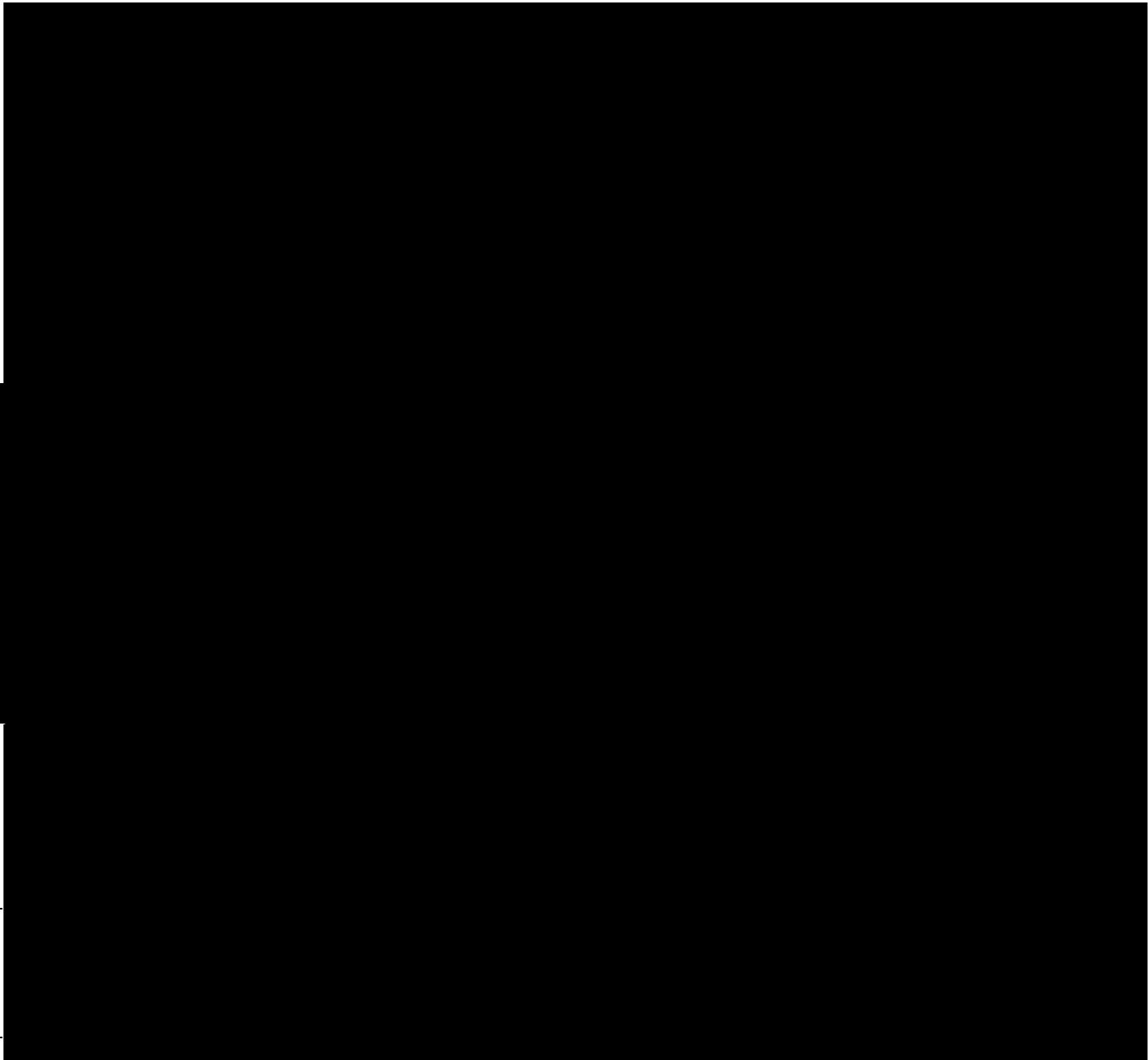
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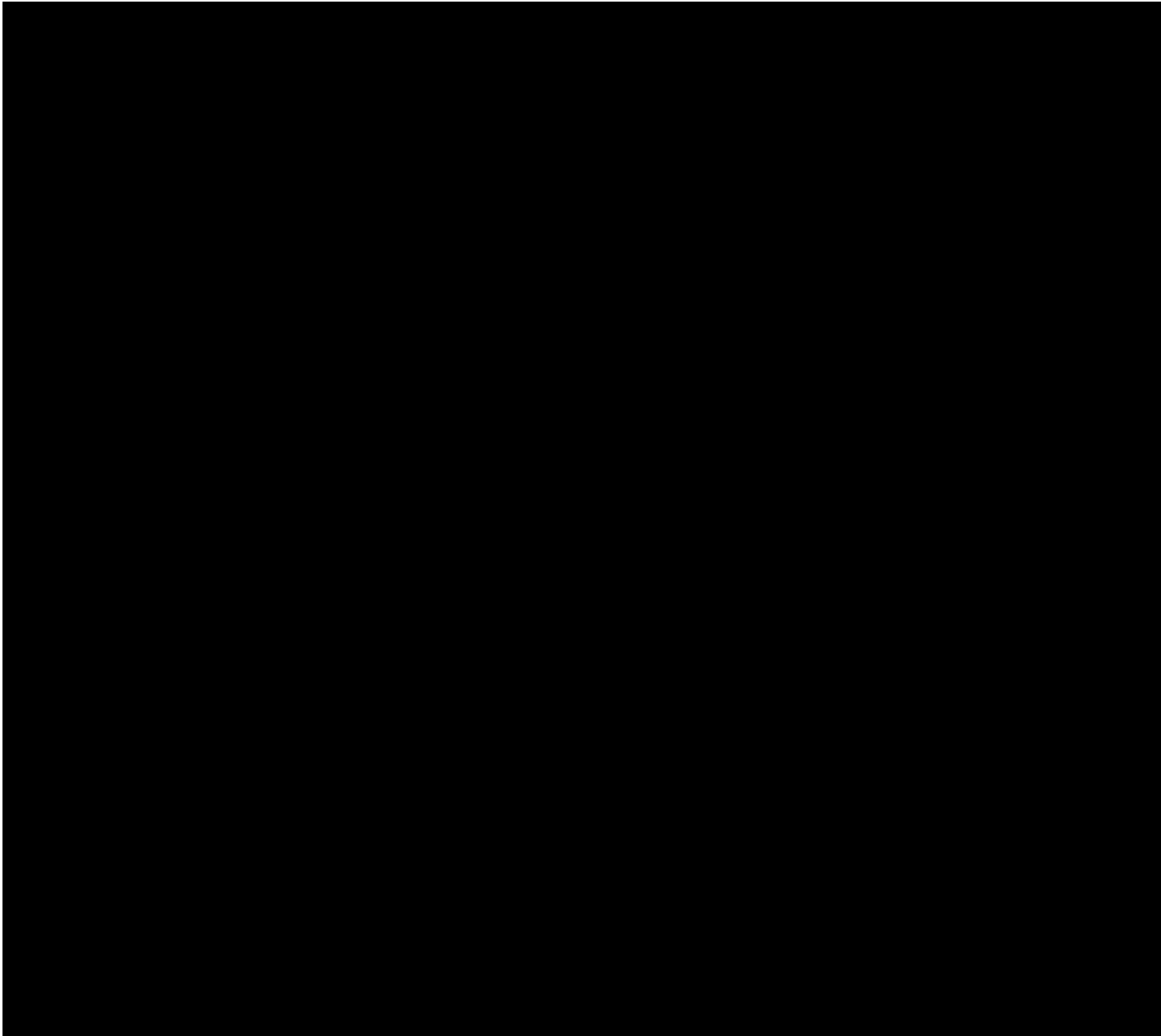
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]





[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]







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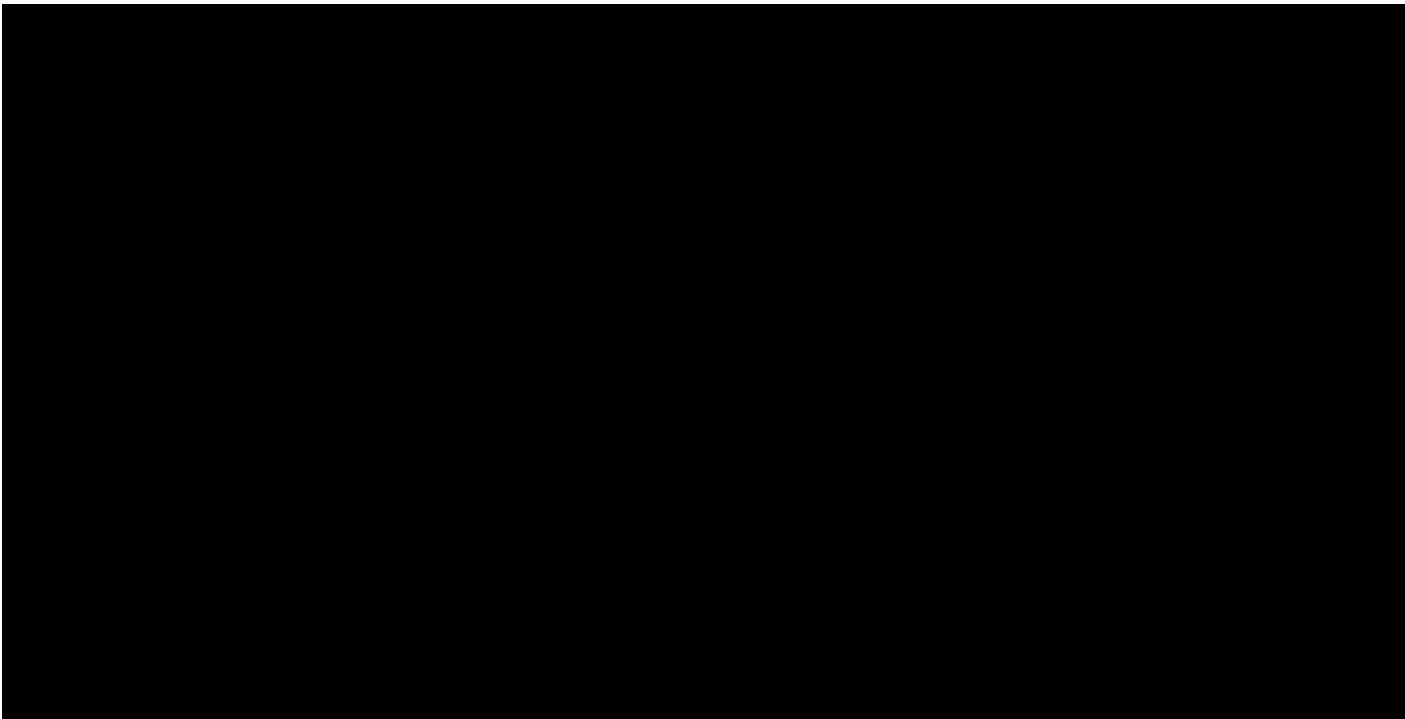
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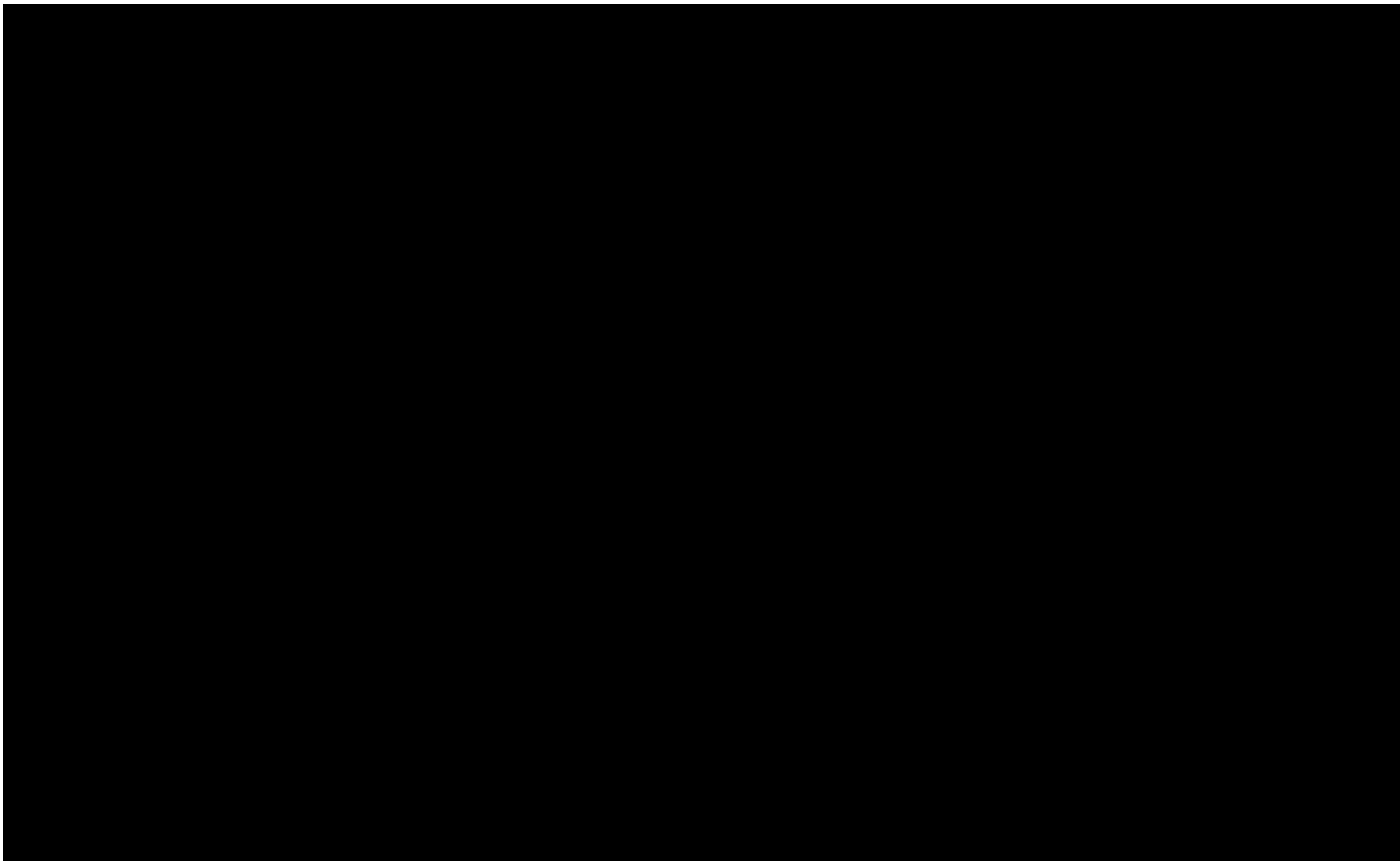
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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

