

PSA 1 Technical Notes

DSO 1

Target

Increase external sales per employee of Invest NI manufacturing clients by an average of 6% per annum

Baseline

Baseline is 5.1% CAGR (compound annual growth rate, as calculated below) over the 4 year period 2002/03 – 2005/06

$$\text{CAGR} = \left(\frac{\text{Ending Value}}{\text{Beginning Value}} \right)^{\left(\frac{1}{\# \text{ of years}} \right)} - 1$$

The most up to date baseline figure for the reporting period is £107,509 in 2005/06

Definitions

External sales are defined as all sales to destinations outside Northern Ireland

The target relates to businesses which have been offered significant levels of assistance from Invest NI (more than £25,000 in last 5 years or £250,000 in the last 10 years). Measurement of the target also excludes the performance of hotels and restaurants, Third Sector Organisations and social enterprises

Technical Notes

Tax & Excise duty has been excluded from Invest NI sales figures for businesses in the tobacco sector
To calculate external sales per employee, employment in businesses which are unable to report sales (cost centres) have been excluded from these calculations

The period over which the growth rate will be measured is from 2007/08 – 2010/11

Growth will reflect both closures and opening of client companies during the period and businesses which become clients or cease to be clients.

Progress against target is measured in constant prices, DETI Statistics Research Branch advise on use of inflators

Data Source

Data is sourced from the NI manufacturing sales and exports survey, the Exporting NI Services Survey, Invest NI client monitoring. Some estimation will be required for complete coverage.

95% Confidence Interval

There is no sampling error as we attempt to capture statistics for all clients; however it is known that non response will introduce error into the reported figures.

Non response error is reduced considerably by the inclusion of modelled figures which are based on sector performance or previous performance of the business (if available)

There is also an element of error introduced within the modelled figures, however, this is reduced by gaining response for larger businesses (50+ employees) which will have a greater impact on the totals.

Reporting Timescale and frequency

This target will be reported on annually. Outcomes for each year will be available at the end of the first quarter of the following year.

Final reporting against this measure will be available in Spring 2012

Revisions

Provisional figures are reported annually and revisions will be provided in the subsequent year.

PSA 1 Technical Notes

Target

Increase external sales per employee of Invest NI tradeable services clients by an average of 4% per annum

Baseline

Average annual growth in external sales per employee for Invest NI clients in the service sector was 2.6% (CAGR) from 2002/03 to 2005/06.

The most up to date baseline figure for the reporting in period is £55,783 in 2005/06

Definitions

External sales are defined as all sales to destinations outside Northern Ireland

The target relates to businesses which have been offered significant levels of assistance from Invest NI (more than £25,000 in last 5 years or £250,000 in the last 10 years). Measurement of the target also excludes the performance of hotels and restaurants, TSO's and social enterprises

Technical Notes

To calculate external sales per employee, employment in businesses which are unable to report sales (cost centres) has been excluded from these calculations

The period over which the growth rate will be measured is from 2007/08 – 2010/11

Growth will reflect both closures and opening of client companies during the period and businesses which become clients or cease to be clients.

Progress against target is measured in constant prices, DETI Statistics Research Branch advise on use of inflators

Data Source

Data is sourced from the NI sales and exports survey, the Exporting NI Services Survey, Invest NI client monitoring. Some estimation will be required for complete coverage.

95% Confidence Interval

There is no sampling error as we attempt to capture statistics for all clients; however it is known that non response will introduce error into the reported figures.

Non response error is reduced considerably by the inclusion of modelled figures which are based on sector performance or previous performance of the business (if available)

There is also an element of error introduced within the modelled figures, however, this is reduced by gaining response for larger businesses (50+ employees) which will have a greater impact on the totals.

Reporting Timescale and frequency

This target will be reported on annually. Outcomes for each year will be available at the end of the first quarter of the following year.

Final reporting against this measure will be available in Spring 2012

Revisions

Provisional figures are reported annually and revisions will be provided in the subsequent year.

PSA 1 Technical Notes

Target Increase by 3 percentage points export sales as a percentage of total sales by Invest NI client companies excluding the top 25 exporting companies
Baseline With the removal of the top 25 businesses (2002/03) exports as a % of total sales was 30.5% in 2005/06, this is the most recent information available in March 2008
Definitions Exports is defined as sales to destinations outside the UK
Technical Notes The top 25 businesses relate to the top 25 exporting Invest NI client companies in 2007/08, this will remain fixed over the period. However, growth will reflect both closures and opening of client companies during the period and businesses which become clients or cease to be clients The target relates to businesses which have offered significant levels of assistance offered from Invest NI (more than £25,000 in last 5 years or £250,000 in the last 10 years). Measurement of the target also excludes the performance of hotels and restaurants, TSO's and social enterprises Tax & Excise duty has been excluded from Invest NI sales figures for businesses in the tobacco sector The period over which the growth rate will be measured is from 2007/08 – 2010/11 Figures are provided in constant prices. Because a different inflator is used for exports and sales, figures provided in constant prices will provide different values than those provided in current prices.
Sources Data is sourced from the NI manufacturing sales and exports survey, the Exporting NI Services Survey, Invest NI client monitoring and an element of estimation (approximately 10%)
95% Confidence Interval There is no sampling error as we attempt to capture statistics for all clients; however it is known that non response will introduce error into the reported figures. Non response error is reduced considerably by the inclusion of modelled figures which are based on sector performance or previous performance of the business (if available) There is also an element of error introduced within the modelled figures, however, this is reduced by gaining response for larger businesses (50+ employees) which will have a greater impact on the totals.
Reporting Timescale and frequency This target will be reported on annually. Outcomes for each year will be available at the end of the first quarter of the following year
Revisions Provisional figures are reported annually and revisions will be provided in the subsequent year

PSA 1 Technical Notes

Target (2008/09) By 31 March 2009, encourage 175 new first time exporters
Baseline The baseline figure for the reporting period is 611 over the 3 year period 2005/06 to 2007/08
Definitions A new exporter is a company whose export sales in the past 12 months were no more than 25% of its turnover. Companies that have only exported to the RoI may also be included
Technical Notes The target relates to the number of new exporters which have been supported by Invest NI 's programme of trade services during the reporting period
Data Source Data is obtained from records held on file and Trade Executives knowledge of companies.
Quality Issues Data quality is reliant on accuracy of records and knowledge of companies
Reporting Timescale and frequency Figures can be reported monthly or quarterly and will be available 14 days after the end of the reporting period.
Revisions Figures will be validated at the year end and a total for the full financial year will be provided at that time

PSA 1 Technical Notes

Target (2008/09)

By 31 March 2009, support 375 companies to diversify into new markets

Baseline

The baseline figure for the reporting period is 1,095 over the 3 year period 2005/06 to 2007/08

Definitions

A new to market company is a business which has not exported to the country concerned within the previous 12 months and normally has no established representation there

Technical Notes

The target relates to the number of new to market companies which have been supported by Invest NI's programme of trade services during the reporting period

Data Source

Data is obtained from records held on file and Trade Executives knowledge of companies.

Quality Issues

Data quality is reliant on accuracy of records and knowledge of companies

Reporting Timescale and frequency

Figures can be reported monthly or quarterly and will be available 14 days after the end of the reporting period.

Revisions

Figures will be validated at the year end and a total for the full financial year will be provided at that time

PSA 1 Technical Notes

Target (2008/09)

By 31 March 2009, deliver Export Skills and Knowledge workshops for 450 delegates

Baseline

The baseline figure for the reporting period is 1,487 over the 3 year period 2005/06 to 2007/08.

Definitions

A delegate is a representative from a company.

Technical Notes

The target relates to the number of delegates which have attended export Skills and Knowledge workshops during the reporting period.

Data Source

Data is obtained from records held on file.

Quality Issues

Data quality is reliant on accuracy of records

Reporting Timescale and frequency

Figures can be reported monthly or quarterly and will be available 14 days after the end of the reporting period.

Revisions

Figures will be validated at the year end and a total for the full financial year will be provided at that time

PSA 1 Technical Notes

Target (2008/09)

By 31 March 2009, support market visits for 500 companies

Baseline

The baseline figure for the reporting period is 1,530 over the 3 year period 2005/06 to 2007/08.

Definitions

A market visit participant is a company which has been assisted to participate in Invest NI's programme of trade missions & exhibitions or supported through the SOLEX solo participation scheme.

Technical Notes

The target relates to the number of market visit participants which have been supported by Invest NI during the reporting period

Data Source

Data is obtained from records held on file.

Quality Issues

Data quality is reliant on accuracy of records.

Reporting Timescale and frequency

Figures can be reported monthly or quarterly and will be available 14 days after the end of the reporting period.

Revisions

Figures will be validated at the year end and a total for the full financial year will be provided at that time

PSA 1 Technical Notes

Target

Support 300 new start ups selling outside Northern Ireland

Baseline

The baseline figure for the reporting period is 388 over the 5 year period 2002/03 to 2006/07.

Definitions

The definition of new external starts includes;
New start up businesses with the potential for external or export
And

An existing business that is entering a market outside NI for the first time, which receives its first offer of financial support from Invest NI

These businesses must have the potential within 3 years to sell at least 25% of sales in external markets or at least £250,000 in external markets.

Technical Notes

The target relates to the number of offers of assistance approved by Invest NI to these start up businesses over the period which is being reported.

Data Source

Data is sourced from the Invest NI client database.

95% Confidence Interval

There is no sampling error in the statistics reported.

Reporting Timescale and frequency

Figures can be reported on a quarterly basis and will be available 14 days after the quarter end.

Revisions

Provisional figures will be provided quarterly and final figures will be provided within 8 weeks of the financial year end.

PSA 1 Technical Notes

Target

Support 45 new start ups selling outside the UK

Baseline

The baseline figure for the reporting period is 25 over the 5 year period 2002/03 to 2006/07.

Definitions

Global Start companies are start up companies with the potential to trade globally from their inception or existing companies who are trading globally for the first time, with a base in Northern Ireland. Global Starts may come from overseas or be based in Northern Ireland.

These companies will be primarily knowledge based / information technology based and ideally will have strong financial and management systems already in place.

Technical Notes

The target relates to the number of offers of assistance approved by Invest NI to global start businesses over the period which is being reported.

Data Source

Data is sourced from the Invest NI client database.

95% Confidence Interval

There is no sampling error in the statistics reported.

Reporting Timescale and frequency

Figures can be reported on a quarterly basis and will be available 14 days after the quarter end.

Revisions

Provisional figures will be provided quarterly and final figures will be provided within 8 weeks of the financial year end.

PSA 1 Technical Notes

DSO2

Target

Secure total annual wages and salaries of £345 million, reflecting inward investment successes and growth from locally owned clients.

Promote 6,500 new jobs from inward investment, of which 5,500 will have salaries above the private sector median (PSM) and 2,750 will have salaries at least 25% above the NI PSM

Baseline

Over the 3 year period 2004/05 – 2006/07 there were 9,465 new jobs promoted through inward investment

Over the period 2002/03 – 2006/07, 50% of jobs were above the private sector median and 34% were 25% above the private sector median.

Definitions

Inward investment is investment in NI by individuals/companies located in another country (including other regions of the UK).

Figures relate to Invest NI clients only. There may also be non-Invest NI externally owned clients investing in Northern Ireland over the period.

For inward investment, figures include both new inward investments and reinvestments by externally-owned clients.

New jobs refers to job promotions, which are jobs expected to be created by a particular project.

Technical Notes

The private sector median (PSM) salary was accepted as the best measure of central tendency, as a small number of very high salaries may skew the mean. Basic salaries are collected in order to report on a consistent basis with the PSM.

Invest NI data is collected from casework prepared at the project planning stage and therefore reflects anticipated wages and salaries, which may differ from salaries paid once jobs are actually created.

For measurement purposes new jobs are categorised by type with the number within each category recorded, along with the mean average salary for each type. It is considered acceptable to use the mean salary for each job type since at the project planning stage all jobs of a certain type would normally be expected to be assigned the same salary value, therefore, the mean and median average figure will generally be the same.

Where a salary range is only available for a job category, the mid point of that range will be recorded.

The number of jobs with expected salaries above the PSM is then reported against the target.

Source

The Northern Ireland Private Sector Median (PSM) Wage is based on the results of the Northern Ireland Annual Survey of Hours and Earnings (ASHE). Salaries are compared to the PSM in each individual year.

The NI PSM figure used is basic weekly earnings for full-time employees. This ensures consistency with Invest NI casework data. Basic Pay includes pay before deductions for PAYE, National Insurance, pension schemes and voluntary deductions but does not take account of travel and subsistence expenses or any overtime, shift premium, bonus or incentive pay.

Invest NI results are sourced from the casework for each project, which is collected by the Client Executive from the client. Data is then subject to routine validation.

PSM used as Invest NI client businesses are all in the private sector

95% Confidence Interval

PSA 1 Technical Notes

The Northern Ireland private sector median weekly wage for full time jobs is £326.2. The 95% confidence interval for this value is $\pm 3.7\%$. The figures collected for Invest NI assisted projects represents a census, there is therefore no sampling error, Invest NI have safeguards in place to minimise data input and handling errors.

Reporting Timescale and Frequency

Figures for job promotions will be reported quarterly while statistics comparing Invest NI assisted projects to the Northern Ireland PSM will be available annually in November due to the reporting schedule of the Annual Survey of Hours and Earnings. A final report against job targets will be available in June 2011 while final report against salary targets will be available from October 2011.

Revisions

Figures will not be revised.

PSA 1 Technical Notes

Target (2008/2009) By 31 March 2009, secure total annual wages and salaries of around £115m, derived from inward investment and growth from locally- owned clients
Baseline £147.3m (at end of 07/08)
Definitions Inward Investment includes the following: New foreign direct investment – New mobile projects by companies not already in Northern Ireland or by existing international investors into new functional geographical areas Re-investment/Expansions by existing externally owned companies – Mobile investment projects by existing investors in functional areas already undertaken in Northern Ireland
Technical Notes The target relates to total annual salaries expected to be created by offers of assistance approved by Invest NI to locally and externally owned companies over the period which is being reported.
Data Source Data is sourced from Invest NI reporting systems
Quality Issues Data quality is reliant upon routine validation to verify the initial input of primary data.
Reporting Timescale and frequency Quarterly
Revisions Figures will be revised and validated at the year end and a total for the full financial year will be provided at the end of quarter four.

PSA 1 Technical Notes

Target 70% of new FDI projects within 10 miles of an area of economic disadvantage
Baseline 90% between 2005/06 – 2007/08
Definitions New foreign direct investment – New mobile projects by companies not already in Northern Ireland or by existing international investors into new functional geographical areas Area of Economic Disadvantage – Areas defined by DETI as disadvantaged areas through the Noble Index (see Annex 1 for listing of these areas)
Technical Notes The target relates to offers of assistance approved by Invest NI to new FDI companies Measurement is carried out “as the crow flies” using MAPINFO software Acknowledgement of geographic boundaries such as Lough Neagh are considered when determining whether a project is within the specified distance Distance is measured from the centre point of the postcode of the client to the nearest disadvantaged area
Data Source Data is sourced from Invest NI reporting systems and from the DETI Disadvantaged Areas map
Quality Issues Data quality is reliant upon accurate input of postcode data for new FDI projects and subsequent data validation Postcodes for proposed projects may change from the time the project is approved and the time the business locates at its premises. Data will therefore be revised to reflect any such changes.
Reporting Timescale and frequency Quarterly
Revisions Figures will be revised and validated at the year end and a total for the full financial year will be provided at the end of quarter four.

PSA 1 Technical Notes

Target: (2008/09) Invest NI will aim to acquire around 50 acres of land for industrial use in 2008-2009. 75% of which are in areas of economic disadvantage areas
Baseline Invest NI was not actively engaged in acquisition of land in the previous three years.
Definitions Industrial use means for use by Invest NI Client Companies only. Area of Economic Disadvantage – Areas defined by DETI as disadvantaged areas through the Noble Index (see Annex 1 for listing of these areas)
Technical Notes CPD is provided advice and technical input to ensure all designs and estimates are to high standard, robust and VFM
Data Source Data on project progress is filed in Meridio and is provided by CPD, Consultants and internal documents.
Quality Issues Land costs have been agreed by Land Property Services. Development costs are estimates which are refined at each stage of the project until final costs are set by tender.
Reporting Timescale and frequency quarterly
Revisions No revisions

PSA 1 Technical Notes

Target (2008/2009) By 31 March 2009, arrange inward visit programmes for 120 potential investors.
Baseline 134 is the average amount of visits over the 3 year period (2005/06 – 2007/08)
Definitions Inward Visit Programmes: delivery of visit programmes for potential investors, influencers and journalists in support of the promotion of Northern Ireland as an inward investment location.
Technical Notes The target relates to the number of inward visits approved by Invest NI to Northern Ireland over the period which is being reported.
Data Source Data is sourced from Invest NI reporting systems
Quality Issues Data quality is reliant upon accurate input of primary data and routine validation.
Reporting Timescale and frequency Quarterly
Revisions Figures will be revised and validated at the year end and a total for the full financial year will be provided at the end of quarter four.

PSA 1 Technical Notes

DSO 3

Target Reduce energy costs relative to UK/EU regions by 2011
Baseline Baseline is retail costs on standard non-discounted tariffs respectively for gas and electricity to domestic and small business users at 1 April 2008 which are as follows (excluding VAT): Electricity (NIE) 11.11 pence per kWhr (domestic users) 11.6 pence per kWhr (small business users) Gas (Phoenix area) 3.56 pence per kWhr (domestic users) 3.43 pence per kWhr (business users up to 73,200kWhr usage per annum) 3.36 pence per kWhr (business users over 73,200kWhr usage per annum) Action being taken to address and measure progress against the PSA target will reflect Operating Plan targets at 1 April 2008 in respect of: (a) further opening of energy markets eg common arrangements for gas; (b) promoting energy efficiency and other sustainable energy measures; (c) continuing to support growth of a competitive wholesale Single Electricity Market and growth of retail electricity market competition.
Definitions Cost comparisons for retail gas and electricity to domestic and smaller businesses on a price per kwh basis, based on a non-discounted customer tariff. Progress to be reported against each activity shown above.
Technical Notes Period over which annual updates will be provided is from 1 April 2008 until 31 March 2011. Progress will be reported against the specified workstreams and energy cost comparisons identified.
Source Energy statistics will be obtained from principally from NIE Energy, Phoenix Supply Ltd., other energy companies in NI, and in GB and RoI as appropriate. Also from NIAUR, and other sources commercial sources such as "Energy Watch" in relation to comparisons. Energy Division will be the source for reporting on progress in relation to the specified projects.
95% Confidence Interval There should be no sampling error in relation to the cost comparison data once the set of comparative companies and regions has been established, as the data will be actual returns rather than a survey. N/A for project update – should be fully reported at each reporting interval.
Reporting Timescale and Frequency Reporting will be on an annual basis.
Revisions Provisional figures are reported annually and revisions will be provided in the subsequent year.

PSA 1 Technical Notes

Target As in PSA22, secure 12% of electricity consumption in Northern Ireland from indigenous renewable sources by 2012
Baseline Most up to date baseline is 5% in 2007.
Definitions Electricity consumption is total consumption recorded by NIE Energy for all customers in NI. Renewable resources are as defined in 2001 EC Renewables Directive.
Technical Notes Reference to 2012 relates to the year ending 31 March 2013.
Source Direct from NIE Energy on monthly basis.
95% Confidence Interval DETI currently assessing the confidence, which may be affected by non-inclusion of embedded microgeneration leading to underestimation of up to 6%.
Reporting Timescale and Frequency Can be reported monthly but seasonal variations point to annual reporting as more appropriate.
Revisions We do not anticipate any revisions to annual figures.

PSA 1 Technical Notes

Target Increase broadband take-up to 75% of businesses by 2011 from a baseline of 60% in 2006
Baseline The most up-to-date reported value for broadband take-up by business is 60%. This is reported in the NICCI Business Monitor which is produced annually with quarterly updates. The most recent update is September 2008.
Definitions Broadband is a service or connection generally defined as “always on” and providing a bandwidth greater than narrowband (dial-up). Delivery of this target is dependent upon establishing a programme of broadband support primarily for Northern Ireland’s SMEs. [SMEs are defined using standard EU Commission definitions as any business employing fewer than 250 persons and with an annual turnover not exceeding €50 million or a balance sheet total not exceeding €43 million. This definition includes micro, small and medium enterprises.]
Technical Notes The measurement of take-up is assessed as the number of businesses accessing the internet via a broadband connection. The actual connection may be made using a range of different technologies, including ADSL (telephone line), wireless, cable and satellite.
Source The principal data source is the NICCI Business Monitor. This will be supplemented by data collected through the SME Support Programme, with participating SMEs required to report on take-up and use of broadband services as a pre-condition to inclusion within the Programme. The NICCI data will be corroborated by the Ofcom (industry Regulator) Communications Market Nations and Regions Report. This report is produced on an annual basis with analysis specific to Northern Ireland. An independent mid-point review of the support programme will also be commissioned and undertaken in late 2009 to assess the impact against PSA1.
95% Confidence Interval The Ofcom Communications Market Report is based upon a relatively small sample size (629 for the 2007 Report) and produced an error margin at 95% confidence interval of 3-5%. The NICCI Business Monitor is based upon 4 quarterly surveys, each with a sample size of 500 companies.
Reporting Timescale and Frequency Reports emerging from both surveys are produced annually, with quarterly published updates for the Business Monitor. Outcomes for the Ofcom survey are reported approximately 2-3 months after each year end (the 2007 report was published on 28 May 2008). The NICCI annual survey is published approximately 2-3 months after year end (the 2006/07 survey results were published in June 2007). Initial reporting against the PSA1 target will be available in the 2 nd quarter of 2009.
Revisions Figures are reported annually for both surveys. Revisions in respect of the Ofcom Communications Market Report (Nations and Regions) are provided in the subsequent year. Revisions in respect of the Business Monitor are provided on a quarterly basis.

PSA 1 Technical Notes

Target Increase e-business activity by 10% by 2011 from its current low base
Baseline This target is dependent upon the establishment of a broadband support programme for SMEs and the increase on baseline e-business activity is specific to those SMEs participating within the programme. As such, no baseline exists until the programme commences. The contract will be awarded in October 2008 and initial data on participants will come through in the 1 st quarter of 2009/10.
Definitions e-Business activity, within the context of the SME Support Programme, is defined by reference to a “connectivity chain” under which participating SMEs will increasingly adopt higher value use of broadband services. At the lowest level, SMEs will display awareness of and start to access internet services. E-Business activity is displayed when those participating start to develop their own web presence, use the internet for trading and ultimately integrate broadband technologies with back-office systems to drive business improvement, increased productivity and lower business costs (e-business).
Technical Notes N/A
Source Quantitative and qualitative research will be conducted, with SME participants required as a pre-condition to inclusion within the support programme, required to present regular feedback on how they are using broadband to drive their business development. This data can be analysed across a range of industry survey materials, including sophistication rating indices completed in 2004 by DTI and Invest NI which analysed the position of Northern Ireland’s SMEs in terms of their understanding and use of ICT generally against those in England, Scotland and Wales. Qualitative data is also available from the NICCI Business Monitor, with those companies surveyed asked to outline how they are using broadband and to identify the impact at business level of such use.
95% Confidence Interval There is not expected to be any significant sampling error as we will capture statistics and data for each participating SME. It is recognised that there may be instances of non-response and a requirement to estimate impact of the programme will introduce a small, unquantifiable level of error into the reported figures. This is expected to be negligible and is preferable to non-response error. A planned mid-point, independent review of the programme in late 2009/early 2010, to be conducted by consultants, will also allow reported data to be further tested for accuracy.
Reporting Timescale and Frequency Monthly and quarterly highlight reports on the operations of the support programme will be taken from the delivery agent. The agent will also produce an annual report on SME participation and adoption of broadband to drive business improvements. A mid-point evaluation of the programme will be completed in late 2009/early 2010, with the expected report scheduled for 2 nd quarter of 2010. A final review and post project evaluation of the programme will be completed in the 1 st quarter of 2014.
Revisions Provisional figures will be reported monthly, rolled up quarterly and annually, ensuring that revisions to reported data are captured and reported no later than 1-3 months after initial presentation.

PSA 1 Technical Notes

Target Increase the availability of next generation network broadband speeds to 85% of businesses by 2011
Baseline The baseline for this project has been established through work commissioned by DETI in 2007 to assess the impact of confirmed private sector upgrade activity to the telecoms infrastructure (specifically the BT 21CN project). This analysis has flagged the likelihood that upon completion of the BT upgrade activity (scheduled for 2010), approximately one third of premises will see no improvement in broadband services. The analysis has also flagged potential costs for delivery of services across a range of options, from which the target to deliver access for 85% of businesses has emerged.
Definitions Next Generation Access has been defined by the UK Government as “ broadband access networks that connect end-users to the core network with a bandwidth quantity and quality significantly in excess of current levels (a benchmark of 20 Mbps (megabits per second) or more is often used ”.
Technical Notes The delivery of next generation access is likely to require a range of technologies which may include fixed line, wireless, fibre and cable solutions. The definition of what constitutes a next generation access may also include a number of other variables in addition to downstream and upstream values (Mbps), and can include measurements such as mobility and contention. The term “ contention ” is used to describe the extent to which services are shared – for example, a contention ratio of 50:1 means that at any time up to 50 users could be accessing the internet using the shared capacity (bandwidth) available in a service providers network. Typical business contention ratios are 20:1. There are also issues to address around provision of symmetric (same upstream and downstream rates) or asymmetric (typically a higher downstream service than upstream) services. Downstream services are those directed towards the customer and upstream are those involving the customer uploading data to the system.
Source There are a number of data sources for this project. Typically any measurement of the reach of next generation access networks will involve analysis of exchange and cabinet deployments, with that information, in turn, allowing an estimation of the speeds that might be delivered by reference to distance of premises from these locations. This detail is typically available from BT (the incumbent operator in Northern Ireland) in published materials on its website and from Ofcom, the industry regulator, which has commissioned various surveys into theoretical limits of the reach of copper for line-based solutions. These data sources are regarded as industry standards. In 2004 DETI commissioned similar work in delivering 100% access to current generation broadband services – the data underpinning that investment is also available. The challenge in delivering access to NGA networks for 85% of businesses is in pinpointing the locations and concentrations of businesses in Northern Ireland. Extensive mapping activity is underway in the creation of a series of 2 square kilometre grid references for all of Northern Ireland. Using the annual data produced in the Inter Departmental Business Register, the locations of businesses can then be mapped against each grid, allowing for pin-pointing of business clusters and prioritisation of investment to achieve the 85% target. This exercise will also be informed by the availability of other data such as the DETI Disadvantaged Areas Maps.
95% Confidence Interval The mapping of exchanges and cabinets is extensive and reliable and data on the reach of copper by reference to distance from an exchange allows for very accurate assessment of the potential to deliver next generation services.
Reporting Timescale and Frequency

PSA 1 Technical Notes

This target will be reported on in late 2010 when the BT investment is expected to deliver access to next generation services for approximately two-thirds of all premises. It will then be measured at end-2011 to assess the extent to which the 85% access target has been achieved or exceeded.

Revisions

The Inter Departmental Business Register is produced annually and will be used once only when the specification for the investment is being developed and the prioritisation of investment areas is being defined.

PSA 1 Technical Notes

Target

By 2009, reduce latency on communications between the north West and North America by approximately 25% and bring international communications costs in line with those in the major UK cities (e.g. Glasgow and Manchester)

Baseline

Baseline values are established in a feasibility study completed in 2007 by PA Consulting. The value for latency is between 70 and 80 milliseconds for one-way transfer.

The present costs for transfer of the 2 Mb data package are:

- From Letterkenny to New York €30,000 per annum (eircom) and £36,156 (BT)
- From Monaghan to New York €40,740 (eircom) and £33,216 (BT)
- From Londonderry, Belfast or Portadown to New York £18,522 (BT) – no eircom price is available

These values have been established in discussion with industry during the preparation of the technical specification. A new baseline for cost will be established on award of contract (3rd quarter of 2009)

Definitions

Latency is defined as the time taken to transfer a standard 2 Mb package of data between given points. This is measured using a standard “ping test”.

Technical Notes

Establishing the direct international link will improve resilience of the existing telecommunications network and will carry an industry standard performance/availability target of 99.999% availability. The target cost for transfer of data will be measured across a range of broadband packages (10) and will be established as less than or equal to the median annual cost for transfer between London, Manchester and Dublin to New York. The contract imposes rigorous penalties on the successful bidder in the event that costs or latency values exceed industry median. In respect of costs, any revenue generated by the supplier at values exceeding industry median are surrendered to the Department. A “penalty point” process will also apply which may ultimately lead to loss of contract for persistent breach.

Source

The principal data source for measurement of cost is the Telegeography Bandwidth Pricing Database, which is a database of wholesale private line prices on 260 routes worldwide, providing monthly median pricing city to city by reference to reported prices from industry carriers. TPU has taken out an annual subscription to the database and will receive monthly pricing reports. The contract will also include a formula for the calculation of median cost in the event of missing or incomplete Telegeography data for specific routes.

95% Confidence Interval

Publication of data to the Telegeography database is voluntary and there are instances of missing data. This has the potential to introduce a small, unquantifiable level of error in the published figures. However, this is considered to have a negligible effect on the target as the contract includes an agreed formula for assessing median costs for any route.

Reporting Timescale and Frequency

Median cost will be assessed and measured on a monthly basis by DETI, with the first measurement taking place after go-live of the direct international data link (scheduled for 3rd quarter of 2009).

Revisions

Values are reported on a monthly basis, with quarterly summary reports.

PSA 1 Technical Notes

DSO 4

Target

Increase by 8% the average annual growth in BERD expenditure in Invest NI client companies with fewer than 250 employees

Increase by 5% the average annual growth in BERD expenditure in Invest NI client companies with 250 employees or above.

Baseline

From 2002, R&D expenditure in small and medium Invest NI client companies grew by 6.9% CAGR to reach almost £69.5m by 2005.

Despite fluctuations between times, from 2002 to 2005 R&D expenditure in large businesses remained constant at just over £67.5m

Definitions

The definition of BERD is consistent with that used in the NI R&D Survey

Technical Notes

Growth will reflect both closures and opening of client companies during the period and businesses which become clients or cease to be clients.

The period over which the growth rate will be measured is 2007/08 – 2010/11 to account for growth during the 3 year period (2008/09 – 2010/11)

Progress against target is reported in current prices as the information on which the targets were based was also presented in current prices

Source

Data is sourced from the NI R&D survey and Invest NI client companies are identified from the Invest NI client database and marked on the survey

95% Confidence Interval

The Research and Development (R&D) survey is a census of all R&D companies in NI and, as a result, does not have an associated sampling error. However, estimates are made for non-responding companies using previous expenditure, assistance from Invest NI etc. The 2006 response rate was 89% and estimated expenditure for 2005 accounted for 3.5% of total R&D expenditure

Reporting Timescale and Frequency

BERD figures are available by calendar year and will be available annually. Statistics will be available 15 months after period end.

Final outturn against targets (2011 figures) will be available in March 2012

Revisions

Revisions for previous year will be provided

PSA 1 Technical Notes

Target By 31 March 2009, deliver £40m investment in R&D
Baseline The baseline figure for the reporting period is a total of £312m over the 5 yr period 02/03 to 06/07 giving an average of £62m per year.
Definitions Investment to promote innovation, including the provision of assistance for industrial R&D and the provision of research infrastructure.
Technical Notes The target relates to the total project costs related to the offers approved by the Innovation, Research & Technology division
Data Source Data is sourced from the Invest NI client database.
Quality Issues None
95% Confidence Interval There is no sampling error in the statistics reported.
Reporting Timescale and frequency Figures can be reported on a quarterly basis and will be available 14 days after the quarter end.
Revisions Provisional figures will be provided quarterly and final figures will be provided within 8 weeks of the financial year end.

PSA 1 Technical Notes

Target: By 31 March 2009, assist 100 companies to engage in R&D for the first time.
Baseline 270 Companies new to R&D during 2005-08
Definitions Companies new to R&D are defined as those companies that have not availed of IRTD support programmes in the last 5 years.
Technical Notes None
Data Source An Excel Spreadsheet containing contact details for those companies with whom IRTD has had formal relationships (LoO or DDP participant) in the last 5 years is maintained by IRTD. The spreadsheet is revised and updated at the beginning of each financial year - to remove obsolete data. The spreadsheet is updated on a monthly basis.
Quality Issues Accurate data entry in the spreadsheet is required for correct reporting
Reporting Timescale and frequency Progress will be reported monthly via the Operating Plan
Revisions None

PSA 1 Technical Notes

Target To establish 3 Centres of Excellence/Competence Centres during 08/09
Baseline 3 Centres of Excellence supported in the last 3 years.
Definitions The Centre of Excellence/Competence Centre Programme targets major proposals from industry and academia which aim to stimulate leading-edge research. The programme is designed to support projects that will stimulate leading-edge, industrially exploitable and commercially focused research that will: <ul style="list-style-type: none">• improve the competitiveness of local industry• exploit the opportunities offered by new technologies• fuel industrial wealth creation• further restructure the Northern Ireland economy
Technical Notes None
Data Source Progress towards targets will be provided via the Operating Plan
Quality Issues R&D work is intrinsically risky. Almost by definition R&D pursues new ideas and seeks new information. R&D is an iterative process and as such not all projects proceed according to plan. Therefore information is drawn from best estimates of outcomes and is subject to regular changes and updates.
Reporting Timescale and frequency Progress will be reported monthly via the Operating Plan
Revisions None

PSA 1 Technical Notes

Target: By 31 March 2009, support 20 Proof of Concept projects
Baseline 8 projects supported during 2005-2008
Definitions A Proof of Concept project aims to support academic researchers to explore innovative Scientific concepts with commercial potential : A unique approach over existing alternatives An ability to address a significant customer/end-user need The potential to positively impact the NI economy
Technical Notes N/A
Data Source Data is sourced from the Invest NI client database.
Quality Issues N/A
Reporting Timescale and frequency Figures can be reported on a quarterly basis and will be available 14 days after the quarter end.
Revisions Provisional figures will be provided quarterly and final figures will be provided within 8 weeks of the financial year end.

PSA 1 Technical Notes

Target: By 31 March 2009, launch 6 projects through the NISPO Venture Capital Fund
Baseline 12 investments made during 2005-08
Definitions A Deal/Investment is defined as an equity intervention delivered through either the NITECH Fund or its replacement the NISPO Fund.
Technical Notes
Data Source The NISPO Fund Manager will provide quarterly progress reports to Invest NI.
Quality Issues There quality issues expected
Reporting Timescale and frequency The NISPO Fund Manager will provide quarterly progress reports to Invest NI and Invest NI will report progress quarterly via the Operating Plan.
Revisions None