

Technology
Ireland

ibec

Future *Needs*, Future *Thinking* 2020

Technology Ireland
policy priorities 2020

Contents

Four Pillars to Shape the Future **2**

Who we are **6**

What we do **7**

Future Needs, Future Thinking 2020 – Introduction from Director of Technology Ireland **8**

Education and Skills **10**

Competitiveness and Constraints **12**

Supporting Digitalisation across Ireland and Managing and Protecting Data **16**

Taxation Policy and Investment Support **20**

Conclusion **24**



Technology Ireland's primary goal is to help maintain Ireland's position as a global digital leader. *Future Needs, Future Thinking 2020* presents the four key pillars, which will shape the ongoing and future success of the Irish Technology Sector.

Four pillars to shape the future

Future Needs, Future Thinking 2020 puts forward a vision for the Technology Sector in Ireland. It captures the key policy priorities of the sector together with several recommendations, to secure a healthy ecosystem for the sector and enable it to continue to contribute to Ireland's success. The digitally intensive sector now directly employs over 210,000 people.



In order to maintain and grow the tech sector in Ireland, we have prioritised these four key pillars to shape the future:

■ Education and Skills

- Support the priority areas identified in 3rd ICT Skills Action Plan to increase the number of places available in higher education and to provide alternative pathways into the tech sector.
- Implement the STEM Education Review Policy Statement in full to promote STEM subjects and to ensure a better gender balance.

■ Competitiveness and Constraints

- Ireland's visa and work permit application processes should be streamlined and resourced to match best in class international standards.
- Implement the second phase of Tech/Life Ireland to attract and retain international talent.
- Ensure capacity in electrical and water infrastructure meets future needs.
- Streamline planning processes to secure faster decisions on national infrastructure projects and large-scale developments.

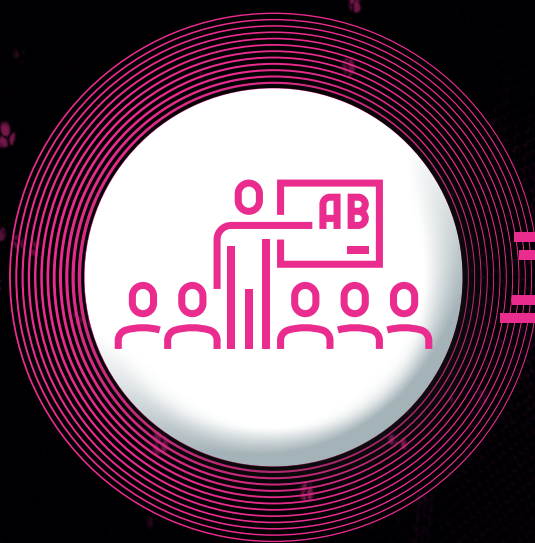
■ Supporting Digitalisation across Ireland and Managing and Protecting Data

- Appoint a Minister of State dedicated solely to Digital Affairs in the Department of An Taoiseach, with responsibility for coordinating relevant Government policies and programmes across Departments.
- Ensure full implementation of the National Cyber Security Strategy (NCSS).
- Avoid interruption to data flow and storage capacity in the event of a no-deal Brexit.
- Work with the European Commission to support practical and evidence-based legislation in all areas regarding data and AI.

■ Taxation Policy and Investment Support

- Support indigenous business through reform of CGT and EIS to encourage and reward investment and increase attractiveness of share-based remuneration.
- Attract and retain FDI tech companies by re-committing to an FDI driven growth model, the 12.5% corporate tax rate and the importance of the R&D tax credit. Also ensure digital tax proposals continue to be progressed through the multilateral OECD framework and a firm stance is taken against the unilateral EU proposals.
- Ensure that R&D supports in digital innovation are adequately resourced and easily accessible to all companies.

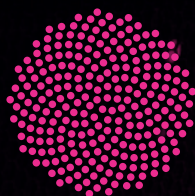
Four pillars to shape the future



**Education
and Skills**



**Competitiveness
and Constraints**



**Technology
Ireland**
Ibec



**Supporting
Digitalisation
across Ireland
and Managing and
Protecting Data**



**Taxation Policy
and Investment
Support**

Who we are

Technology Ireland is the leading representative body for the technology sector in Ireland. Formed in 2017 by the merger of ICT Ireland and the Irish Software Association, it is the authoritative voice driving effective change for the sector.

Our vision is achieved by a rich ecosystem of individuals and member companies, working collaboratively towards our common goals. Our network is structured around a series of core working groups, member forums and networking events, all of which are the primary enablers of our strategy. By forging close working relationships with government departments, state agencies and governing bodies, Technology Ireland ensures the united voice of the Irish technology sector is clearly communicated to the relevant stakeholders and policy makers.

Ireland's digital sector account for about 13% of Ireland's GDP.



The digital sector contributed over €30 billion to Ireland's economy in 2017 and, on its current trajectory, over €44 billion in 2020.

Since 2013, Ireland's digital sector has grown at an average of 12% per annum.



Wages in the ICT sector are 50% higher than the rest of the economy.

What we do

- We represent our members and advocate for policy priorities to support indigenous and FDI tech companies ranging from small start-ups to multinationals.
- We strive to promote the Irish Technology Sector at all levels and to inform the public of the positive impact of the Technology Sector across society.
- We form an essential link between the Technology Sector and Irish and European decision makers.
- We make sure that an Irish voice is heard at European level through working with our sister organisations in Digital Europe
- We provide world class benchmarking advice and training to Irish technology companies in management and HR practises.
- We manage two Skillnets the Technology Ireland ICT Skillnet and the Technology Ireland Software Skillnet providing programmes from Level 5 to PhD.



The digital sector constitutes about 12 percent of Irish economy GVA, with approximately half of this coming from digital producing industries and half from digital using industries

9/10 global software, 9/10 US technology and all of the top 10 born-on-internet companies have their EU HQs in Ireland



The digital sector accounts for 26% of Irish exports.

*Future Needs,
Future Thinking 2020*

**Introduction
from Director of
Technology Ireland**

The technology sector in Ireland has undoubtedly been one of the keystones of Ireland's economic and social growth in the past thirty years. Companies that didn't exist just a few years ago now employ tens of thousands of people in Ireland and continue to drive growth and development. Ireland has become the natural choice to many international companies seeking a home for their European HQs and has also fostered a thriving indigenous technology sector.

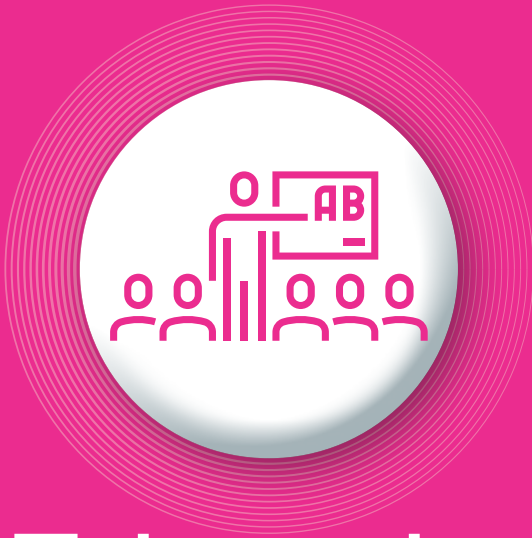


This success has not happened by accident. It is a result of a sustained and consistent recognition by successive governments, state agencies and corporate bodies of the central importance of the technology sector and the need to create a financial, educational and legal environment, which can sustain a thriving technology ecosystem. Ireland is now the envy of many countries, but our current achievements are no guarantee of future success.

In this document Technology Ireland seeks to highlight some of the key policy issues for the sector. There are many opportunities ahead for Ireland, but there are also threats and possible constraints on our growth. By highlighting these we hope to maximise the prospects for Ireland's technology sector.

Technology Ireland is ready to assist and advise policy makers and to take a leading role in the development of progressive, evidence-based policy. I look forward to hearing your views and to continuing our efforts together to support and grow the tech sector in Ireland.

Una Fitzpatrick
Director, Technology Ireland



Education and Skills

There are currently over 10,000 vacancies in the technology sector in Ireland. Education from primary school right through to continuous life-long learning is the fuel that drives the sector. Greater interaction is required between industry and our education system to promote STEM subjects and to ensure a better gender balance.

1. ICT Skills Action Plan

The digital economy transcends all aspects of Irish and international life. It is vital that it is not treated in a piecemeal way and that a strong focus is maintained ensuring that Ireland retains its position as a digital hub.

Technology Ireland recommends

- **Support the expansion of provision in higher education for technology programmes in existing Universities and Institutes of Technology and expedite the provision of new regional Technology Universities.**
- **Provide alternative pathways to ICT, including the resourcing of more ICT apprenticeships from level 6 to level 9.**
- **Encourage upskilling and CPD through ongoing support for Technology Ireland's ICT Skillnet and Software Skillnet.**



How Ireland will benefit

While the traditional third level model is still important in providing tech grads, Ireland needs to provide alternative pathways into the tech sector and be more flexible in how we provide access to ICT qualifications. Apprenticeships programmes provide an additional talent pipeline of new entrants into the tech sector. Lifelong learning and CPD are of particular importance to the ever-evolving tech sector. The Technology Ireland ICT Skillnet and Software Skillnet programmes are hugely valuable to industry. They are enterprise led, demand driven and offer targeted learning at a discounted rate.

2. STEM education

Government and academia must do even more to promote STEM subjects right from primary level. The STEM Education Review Policy Statement (2017-2026) must be fully implemented and go beyond good intentions.

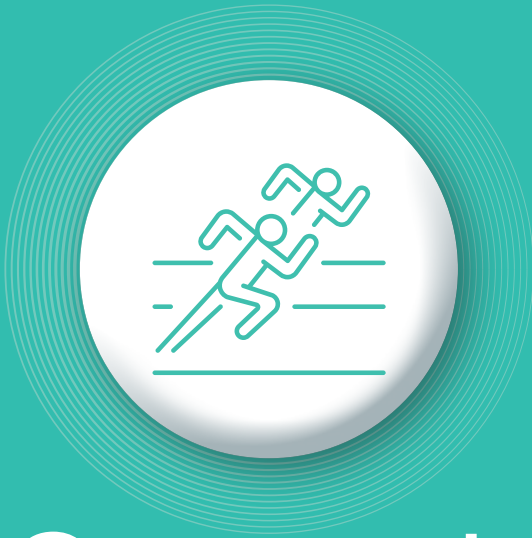
Technology Ireland recommends

- **Develop robust framework for greater industry involvement in STEM promotion. The framework currently proposed is not sufficient. A new framework should provide clear unambiguous outcomes and tools for companies to engage with schools.**
- **The new Computer Science curriculum at Leaving Certificate is a positive development but needs a much more ambitious rollout programme, including significant teacher training, to deploy beyond the pilot schools. Also the Computer Science examination should be computer based. A paper-based exam is not sufficient.**



How Ireland will benefit

Ireland currently has a technology skills gap. STEM promotion plays a vital role in preventing that gap from widening and will also encourage wider female participation in the technology sector.



Competitiveness and Constraints

Ireland is facing a global challenge to maintain and improve its position as a digital sector leader. There are many factors which influence our international competitiveness. Skills shortages are a well-documented global issue and while Ireland can attract overseas talent, we compete internationally for that talent and need to eliminate anything which might hinder our success.

Domestic infrastructural constraints must also be minimised to support growth of FDI and indigenous companies.

Ireland's economy continues to recover, however underinvestment during the recession has led to some constraints. The housing shortage is affecting our ability to attract talent. There are concerns also about the future capacity of our facilities infrastructure. Delays in developing our electrical grid and water infrastructure could impact on our future ability to secure large investment. Planning processes and legal appeal procedures need to be streamlined to secure faster decisions on national infrastructure projects and large-scale developments.

3. Processing of visas and work permits

Delays or impediments to bringing in key skilled staff from abroad must be eliminated. Recent changes to spousal work permits are welcome, but it is essential that there is no delay in processing permits and visas especially for trusted partner companies.

Technology Ireland recommends

- **Ireland's visa and work permit application processes should be streamlined and resourced to match best in class international standards.**



How Ireland will benefit

Ireland's has an open international economy particularly within the tech sector. Easy, frictionless access to international talent is crucial to providing Ireland with a competitive edge.

4. Tech/Life Ireland

The Tech/Life Ireland programme, which promoted Ireland as an attractive destination for tech professionals was a welcome and valuable resource in helping to attract talent to Ireland.

Technology Ireland recommends

- **The second phase of Tech/Life Ireland should be implemented as quickly as possible and given adequate resources.**



How Ireland will benefit

While the initial roll out of Tech/Life Ireland did attract international professionals, the second phase will seek to make the transition easier by providing a one stop shop, which can signpost information on all aspects of living in Ireland, from taxation to education and health systems. This additional support will improve retention rates of international talent.

“Ireland is now the envy of many countries, but our current achievements are no guarantee of future success.”



5. Infrastructure capacity

Ireland's welcome economic recovery has highlighted some constraints. The housing shortage is affecting our ability to attract talent. There are concerns also about the future capacity of our facilities infrastructure.

Technology Ireland recommends

- **The north south electrical interconnector must be given urgent priority along with the upgrading of our national electric grid infrastructure to transfer wind energy across the country.**
- **Support water infrastructure in the greater Dublin area by accelerating plans to link to River Shannon supply and provide additional treatment plants and water storage facilities.**



How Ireland will benefit

Delays in developing our electrical grid and water infrastructure could impact on our future ability to secure large investment. Progress in these areas will provide confidence to companies planning to invest in Ireland.

6. Planning processes

Ireland has already seen major delays to necessary infrastructure projects and loss of FDI due to extended planning processes.

Technology Ireland recommends

- **The procedure for designating Strategic Infrastructure Development (SID) projects within An Bord Pleanála must be simplified.**
- **Introduce legal reforms to reduce the number of frivolous or vexatious appeals.**



How Ireland will benefit

A streamlined planning and appeals process helps provide certainty for government and businesses.



Supporting Digitalisation across Ireland and Managing and Protecting Data

Given the high priority assigned to digitalisation from the new European Commission, Ireland requires a dedicated ministry, with high level political commitment, focussed on driving a whole of government response to delivering digital infrastructure and public services.

In parallel, we must view data as we would any other resource and carefully manage and protect it, while not impinging on our capacity to utilise it to maximum benefit. Ireland is a digital data hub for Europe and this position will to some extent be reinforced by Brexit as companies seek a European base for their data. However, a hard Brexit could also threaten the flow and storage of data disrupting all sectors of the economy.

Our unique position as European HQ for many international data companies means that we are most affected by regulation and legislation in this area. Equally Ireland has a responsibility to lead the way in shaping evidence based regulation and to demonstrate best practice in the implementation of those regulations.

7. Government focus

The digital economy transcends all aspects of Irish and international life. It is vital that it is not treated in a piecemeal way and that a strong focus is maintained ensuring that Ireland retains its position as a digital hub.

Technology Ireland recommends

- **Appoint a Minister of State dedicated solely to Digital Affairs in the Department of An Taoiseach, with responsibility for coordinating relevant Government policies and programmes across Departments, developing our digital infrastructure and public services, bridging digital divides, engaging stakeholders, and securing Ireland's place as a world-leading digital economy.**



How Ireland will benefit

The digital economy is simply too big, too important and intrinsically a crucial part of our wider economy. Therefore Ireland requires a dedicated ministry, with high level political commitment, driving a whole of government response. This response will focus on developing our digital infrastructure and public services, bridging digital divides, engaging stakeholders and securing Ireland's place as a world leading data economy.

8. Cyber security

Technology Ireland welcomes the recent consultation on a new National Cybersecurity Strategy (NCSS) and looks forward to working with stakeholders on the successful implementation of that strategy. Government must ensure that our national cyber security and data protection capabilities are adequately resourced, and that Ireland is seen internationally to be playing a strong role in protecting critical infrastructure and managing cyber risks.

Technology Ireland recommends

- **Provide a clear and co-ordinated structure for the government departments and public bodies that have a role in national cyber security.**
- **Prioritise and strengthen cyber security capabilities across government departments and relevant public bodies e.g. Central Bank, DPC, ComReg, EirGrid, Ervia.**
- **Ensure training and education programmes fosters awareness and talent in cybersecurity.**



How Ireland will benefit

Ireland can ensure the security of its public bodies and infrastructure and also position itself as a lead player in the cyber security industry.

9. Brexit

A hard Brexit without a withdrawal agreement will cause many problems regarding data. In that event Britain would be treated as a third party with no data transfer or storage agreement in place. It is imperative that government is fully aware of this threat and does all in its power to avoid such a scenario, which would prove extremely disruptive to Irish business. To date, the EU Commission has stated that the adoption of an accelerated adequacy decision, which would permit transfers of personal data to the UK, is not part of the Commission's contingency planning.

Technology Ireland recommends

- **Avoid interruption to data flow and storage capacity in the event of a no-deal Brexit. A public campaign is required to notify businesses that they must use alternative mechanisms for transfers of data to UK such as standard or model contractual clauses approved by the European Commission. Ireland must work with partners to deliver a mutual adequacy decision in a future relationship post-Brexit.**



How Ireland will benefit

Data readiness preparation will lessen the impact of a possible hard Brexit to trade and commerce.

10. Evidence-based data regulation

Technology Ireland recognises the need for regulation, but any such regulation should be measured, evidence-based and assessed with regard to impact on business. This is especially important for smaller companies with limited resources. It is imperative that legislation does not stifle innovation and development. Technology Ireland is working with our sister organisations in Digital Europe to develop robust and practical regulations and guidelines at European level.

Technology Ireland recommends

- **As the European HQ for many multinational data companies Ireland should be to the forefront in shaping any legislation or regulations in this area. It is important that the Irish government supports these efforts at European Council level.**



How Ireland will benefit

Rather than reacting to legislation and directives from Europe, by participating in the process, Ireland will be a leader in the design of and implementation of all regulation concerning digital data. This will help secure our position as the digital hub of Europe.



“There are many opportunities ahead for Ireland, but there are also threats and possible constraints on our growth.”



Taxation Policy and Investment Support

It is crucial that Ireland provides a positive business environment for entrepreneurs and FDI tech companies. Appropriate fiscal supports are crucial for accelerating the growth of the indigenous technology sector and for embedding foreign investments. These can take many forms including adjustments to the tax system to encourage entrepreneurs and owners of capital to invest.

Better tax treatment of share-based remuneration would support start-ups, developing and established companies; and would help Ireland to attract and retain the top talent that is critical to building innovative and high value-adding teams.

While the global business model is in flux, Ireland should continue to engage with the multilateral OECD framework and resist any unilateral challenges to our FDI model, in the area of corporate taxation or digital tax.

11. Supporting indigenous business

While FDI will always play a welcome and important role in Ireland's success, it is vital that we have a thriving indigenous tech sector also. Our tax system should reward entrepreneurs, while easier access to R&D support should help Irish SMEs compete internationally.

Technology Ireland recommends

- **Send a signal of intent to serial entrepreneurs by radically improving the CGT entrepreneurs' relief by introducing a 12.5% rate with no lifetime cap on gains.**
- **Expand CGT entrepreneurs' relief to passive investors in high-potential and high-risk areas to increase the supply of equity for Irish companies.**
- **Charge CGT for earn-out and similar arrangements only on receipt of earnings.**
- **Increase the €150,000 limit on EIS investments to €2 million. The current level is severely restricting the flow of capital to firms.**
- **Losses on EIS investment should be allowed for CGT purposes and any capital gains on the sale of shares taxed as capital gains rather than as income, as is currently the case.**



How Ireland will benefit

Increasing the strength of Ireland's indigenous technology sector is important for the overall health of the ecosystem. This will help to retain indigenous talent and attract international skills.



12. Attracting and retaining FDI

As well as access to talent and skills, Ireland's competitive corporate tax regime has played a key part in our success in attracting FDI. However, the global FDI model continues to change and adapt. US tax reform and the OECD BEPS initiative will both have an influence on future decisions around FDI. Despite these changes Ireland must continue to position itself as a leading location for FDI tech companies.

Technology Ireland recommends

- **Provide certainty to the regime by re-committing to an FDI driven growth model, the 12.5% corporate tax rate and the importance of the R&D tax credit.**
- **Make sure digital tax proposals continue to be progressed through the multilateral OECD framework and a firm stance is taken against the unilateral EU proposals.**
- **Prepare for a post BEPS2 world by ringfencing any future overruns in CT revenues for spending on innovation, education, or capital projects alone.**



How Ireland will benefit

Ireland provides a business model of substance to existing and potential FDI tech companies. Continued investment in education, infrastructure and innovation will bolster that model. While we cannot and never have relied solely on our corporate tax rate, it remains a key part of our package and should not be challenged unilaterally. The OECD is the correct forum for these international discussions. Any unilateral action by Ireland or other European countries on this issue prior to OECD recommendations could place Ireland at a competitive disadvantage.

13. R&D capabilities and investment supports

OECD comparisons show Ireland behind on R&D particularly with SMEs. Take up of existing R&D supports is relatively low amongst SMEs and the packages must be made more accessible and attractive to entrepreneurs. Supports in digital and technological innovation must also be adequately resourced.

Technology Ireland recommends

- **Introduce a simplified pro-forma R&D tax credit scheme for SMEs, which allows smaller firms to overcome funding constraints on their innovative activity.**
- **Introduce accelerated capital allowances for a number of areas of advanced manufacturing (including computerised/computer aided machinery and robotic machines). Ireland has the second lowest density of industrial robots in the EU15, despite them being strongly linked with increased productivity.**
- **Public procurement should be used as a driver for innovation. The OGCIO should promote the use of the full range of innovation procurement approaches allowed under the EU Procurement Directives.**
- **Interaction between indigenous and FDI companies should be encouraged by providing seed capital to indigenous suppliers of FDIs, thus providing an element of de-risking.**



How Ireland will benefit

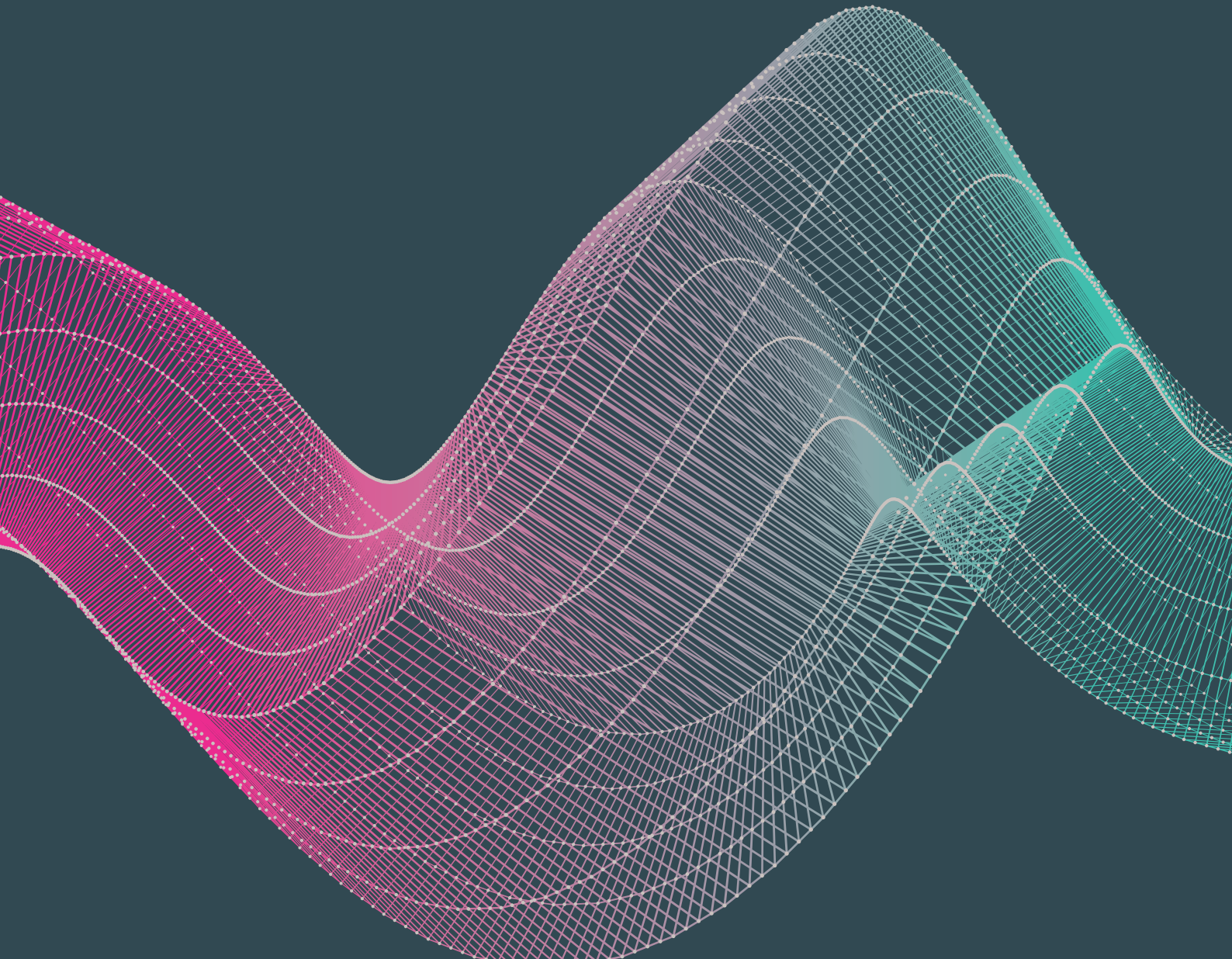
Providing R&D support to indigenous companies through public procurement strategy and seed capital schemes will encourage a healthier tech ecosystem and engagement between indigenous and FDI tech companies.

Conclusion

Technology Ireland believes that the priorities outlined in *Future Needs, Future Thinking 2020*, if addressed, will help to secure Ireland's place as a global technology hub. By its very nature the technology sector is everchanging and Ireland must always strive to be ahead of those changes or risk losing its advantage.

To maintain our competitiveness into the future it is vital that government maintain a positive financial, social and infrastructural environment for the technology sector. Our talent supply must also be preserved both through training and education and promotion of STEM subjects, but also through making Ireland an attractive choice for overseas talent.

Ireland holds an enviable place in the global technology sector. The technology sector is crucial to Ireland's ongoing success and will continue to play a huge part in our future prosperity, but it must not be taken for granted. Technology Ireland looks forward to working with all stakeholders to help ensure that continued success.



Technology Ireland
84/86 Lower Baggot Street
Dublin 2
T: + 353 1 605 1500
E: info@technology-ireland.ie

www.technology-ireland.ie