

Ireland 2040 - Ashbourne Chamber's Submission on the National Planning Framework



Map showing Metro North to Ashbourne, Dunbooyne to Navan Rail line, and travel times from Ashbourne. Ashbourne is about 8 or 9 miles from Dublin Airport.

Whereas City West Business Campus is 17 miles to Dublin Airport, Sandyford Industrial Estate is 21 miles to Dublin Airport, Dublin City Centre is 25 minutes from Ashbourne.

Introduction

Ashbourne Municipal District has a population 27,106 (2011 data). The 2016 figure is likely to exceed 30,000. Nearby Ratoath and Laytown/ Bettystown Municipal Districts have populations of the order of 32,000 (2011 data) each. The 2016 figure for all 3 Municipal Districts is likely to be over 100,000 (estimate).

Ashbourne and the neighbouring towns in South East Meath are part of the greater Dublin City catchment and also have very strong economic links to Fingal County Council. Eighty per cent (80%) of the population are daily commuters to the greater Dublin Area. Ashbourne is located 8 miles from both the M50 and Dublin Airport. Many employees of the growing airport reside in Ashbourne and District. Substantial residential housing developments are now underway in Ashbourne Municipal District and many more are in the planning stage. The population is growing by 10% every five years.

The Future Challenge

A new major urban centre of South East County Meath has emerged. The major developments and investments by Facebook, Shire and Avoca in south County Meath are indicative of this transformation. An entirely new vision for this growing part of County Meath is urgently required, to include rapid rail access to the City and Dublin Airport, a new Urban Vision and Urban Design framework for the area, and a fully resourced dedicated Urban Planning team within Meath County Council for South East Meath. This Team will work very effectively with colleagues in Fingal and Dublin City Council.

Ashbourne Chamber and Meath Chamber play an important role in promoting business, investment and employment. We endeavour to make County Meath Ireland's number one business destination. We have a highly educated workforce, most of whom work in the City. 400 Businesses currently operate in Ashbourne.

Economic Development

Following the worst economic and social crisis in 2 generations, Ashbourne like many other towns has recovered and offers substantial opportunity for economic development. It is the submission of Ashbourne Chamber that "Creating a Smart Ireland" is the challenge of this generation.

Executive Summary – Creating a Smart Ireland.

Ashbourne Chamber wants Ireland in 2040 to be a state where all our people prosper from a high performing economy, a place where people and businesses thrive. An inclusive Ireland that encourages all its citizens, to contribute to society and add value to their communities. Above all else we need to continue to be creative and innovative in all we do in what will be a truly multi-ethnic society. The Health and wellbeing of all our citizens needs to be nurtured and supported in all we do. A Smart Ireland needs to be generated on solid policy foundations with enhanced effective governance which delivers sustainable growth and a viable 21st century economy. We must create a society based on participation to sustain and support all of our citizens in active Smart Living and Smart Ageing.

The route to a Vibrant Society

Smart Living is the route to sustainable viable continuing economic growth and jobs. Smart living is about building an environmentally aware society with responsible and responsive physical development of Ireland that meet the normative needs of all our people. As part of the 2040 Plan, the Government should map the projected economic and social activity in Ireland, identify our weaknesses and strengths and identify the real potential for the country in the decades ahead.

Smart Living can be defined as “...using technology and innovation both in the public and private sectors to produce products, services, solutions and systems, physical and other infrastructures to improve the quality of life of people of all our citizens.”

Strengths and Challenges

- **Urbanisation is the future. The creation of new communities, new neighbourhoods and suburbs in villages, towns and cities that support Smart Living is a significant challenge. Lack of access to basic waste, water, and road and an integrated, planned, quality transport infrastructure, and communications network are major considerations for senior decision makers and policy makers. A balance will have to be struck to avoid waste of valuable financial and human resources.**
- **The age we live in will be further transformed by technologies of all kinds. Working from home and newly generated hubs and work stations will be the norm and wasteful commutes will be a thing of the past. Employers and Government will need to generate policies that support and nurture Smart Ageing and Smart Living.**
- **Critical to continuing and enhancing economic growth and stability is a high quality broadband network and access to high quality electricity network not dependent on fossil fuels. Wind energy, solar energy and wave energy must be exploited to the maximum possible extent.**
- **Communities need high quality sports, recreational and community facilities, and service facilities that are easily accessible and available to meet their needs. High quality primary, secondary, tertiary and quaternary education facilities, and high quality health service infrastructures are important for sustainable viable**

communities, towns and cities. This includes cycle ways, town parks, retail outlets and a network of easily accessible business and enterprise parks, servicing the needs of start-ups and small to medium enterprises.

- Education systems will have to respond to lifelong learning and support citizens to develop, maintain their skills and competencies throughout their lives.
- A safe, sustainable resilient urban and rural Ireland needs to have regard to a participative approach with all the stakeholders in a catchment.
- Regeneration is a powerful process that lifts communities if regard is had to quality of life, urban design and innovation. Challenges include effective well managed consultation and collaboration implementing best practice in local area planning, retail and service planning. The objective is to shape the future, design modern attractive retail and service offerings, modern smart communities with attractive residential areas and suburbs, with a solid smart sustainable viable business and industrial base.
- Smart living towns such as Ashbourne will thrive if priority is given to evidence-based urban design and spatial planning with appropriate fiscal incentives. Strong local champions and political leaders with the capability to influence to drive development will be the key to a prosperous future. Public awareness and networking with communities pays substantial dividends when smart living communities engage in strategic urban and rural design. Creating “Living Streets and towns for Living in “is critical to future viability of towns such as Ashbourne.
- Apartment living and town housing is the future. It is imperative to build attractive aesthetic features to enhance the living environment. Pedestrians and cyclists need to be prioritised, on street parking needs to be limited, local public and private transport needs to be part of an integrated system. Traffic management needs to prioritise bus and taxi usage with major emphasis on serviced Park and Ride facilities.
- By 2050 we will have 10 million people living on this island - 40% of our population currently lives within 32 kilometres of Dublin City Centre. Government must look to South East Meath to maximise the opportunities that are available close to Dublin. Pursuing the sustainable, viable and incremental development of South East Meath as a new suburb of the greater Dublin area makes sense.
- Ashbourne will grow to 30-40,000 of a population by 2030. Technologies are game changers. Ashbourne can develop into a 21st century digital town building on its unique heritage and potential.
- British migration to Ireland, Internal EU migration to Ireland and the ongoing increasing opportunities for Irish people abroad to return to a vibrant Ireland all require to be considered when designing new 21st century Smart Living Communities.
- There is a strong case to be made for formal collaborative working between Fingal County Council and Meath County Council to shape the future of Ashbourne given its proximity to Dublin Airport and Dublin City centre.

- Collaborative ventures such as Heritage and Historic Towns should be expanded.
- Financial Security is essential and safeguarding the financial protection of our people is a top priority for Government. We must not return to the disastrous decision making of the period prior to 2011

Ashbourne's Contribution – Taking the pressure of Dublin City and Fingal County

South East Meath is a part of the Greater Dublin Area, and due to its proximity to the Airport and M50, our submission is that South East Meath should be considered in the context of the strategic planning and urban design of the Metropolitan Area of Dublin. The provision of high quality water and waste services, smart energy, smart telecommunication including high speed broadband, will enable future smart economic and social development and meet the needs of an increasing population. Any action plan for jobs in the Metropolitan Area of Dublin must give careful consideration to the potential of South East Meath to take serious pressure of the City Centre of Dublin

The following infrastructure developments will help insure a Smart Living environment in South East Meath:

- **New large Campus University in the South East Meath Area near Dublin Airport and City of Dublin. Student accommodation for the greater Dublin area could be provided very cost effectively in Ashbourne and district.**
- **A fundamental shift is required to address our under-utilised economic development potential given Ashbourne's location beside M50 and Airport. Dublin Airport is one of the best connected Airports in Europe.**
- **A dual carriageway from Swords to Dunshaughlin linking the M1, M2 and M3 and M4 should be considered.**
- **We urge the extension of Metro North from the Airport to Ashbourne, Ratoath and Dunshaughlin. We recommend the rail link from Dunboyne to Navan to run East of Dunshaughlin.**
- **We compliment Meath County Council for Economic Development work since 2014, to create jobs in Meath, and to reduce commuting into the City. We agree it is essential to align population growth and employment growth in South East Meath, so our population can live, work and play in the same place.**
- **We seek strategic land banks for future Industrial and Commercial uses in South East Meath to provide employment in South East Meath.**
- **We recommend high density housing to enable better usage of public transport, schools, and community facilities.**
- **We see significant potential for a cluster of smart living and smart aging companies and other potentially specialised industries to locate at Ashbourne, which has a highly skilled educated workforce**

Economic opportunities

Ireland is a 'small country' with quite strong connections across different actors in the public and private sectors, including third and fourth level institutes, research institutes and industry. In particular, Ireland has presented a large number of important initiatives via its major research institutes and strong enterprise base which, combined with a growing sector (and fast growing sub-sectors). This represents a significant opportunity for Ireland in Smart Living. The food & nutrition sector has a strong enterprise base with collaborative opportunities with research centres, innovative SMEs and large corporations, especially in the dairy sector that is well-connected across the entire food chain from improving resource efficiency, nutritional value to reducing food waste. Areas, including housing & transport, especially linked to mobility and independent living, and lifestyle products and services, including tourism, may also successfully target consumers and develop products and services based on current activities and further policy support. Other areas, education and training, financial services, and connectivity and social participation, may not currently represent immediate economic opportunities for Ireland, however, these are important sectors in terms of enabling and strengthening our economy and assisting in Smart Living .

Food and Nutrition

We are currently in the "Wisdom Age" and we are entering the era of 'personalised nutrition.' Consumers are increasingly conscious of opportunities to improve their health, with products that aim to maintain and/or improve mobility and joint health the most popular, with an increasing trend in demand for functional food and drink in Asia. There are many other areas where functional foods can be exploited including heart health, cognitive health, digestive health, sarcopenia (muscle loss with ageing), "mood food" or nutricosmetics. Functional food represents added value and commands premium pricing with higher margins, in comparison with a majority of conventional ingredients or products. Healthy food has a strong foundation in Ireland with a global reputation for quality natural products from dairy through to meat and seafood, which also offers increasingly popular links with agritourism. Ireland has an internationally competitive food industry, with connected actors across the food chain, and with exports of around €10 billion in 2014 (more than 12% of all exports). There is a strong research base (with access to target consumers, for example, in technology centres) with the additional scientific and technical capacity to support Irish businesses in their efforts to develop more and better functional foods, including for older consumers, which is a developing market segment.. Ireland could be a pioneer in integrating all aspects of functional food: from nutrition to sensorial aspects and packaging to make it attractive to older people.

The government could encourage and support Ireland's emerging functional food industry to focus on older consumers. In a highly competitive international environment there is a need to connect key players and help position their offering in the field. It could also work with industry interest groups to communicate the new Irish vision for functional food to the outside world and achieve a similar success as it did with baby food/formula milk. We recommend the following specific actions:

- **Government should appoint a group and national champion to define a vision and strategy for functional food for older people, with a corresponding action plan.**

Connected Health

Connected health is a model for healthcare delivery that uses technology to provide healthcare remotely. Connected health is especially relevant to all citizens, who are more likely to be affected by chronic health conditions than the population as a whole and need to access health services more frequently. People are increasingly using ambient and wearable sensors to generate continuous data through connected devices, whether that is blood pressure or distance walked. These personal devices are being used more for medical applications too. Appropriate data analytics methods and wireless technology to enable remote patient monitoring, point of care diagnostics, and self-care will transform healthcare. Connected health is a large and growing global market encompassing mobile health (mHealth) through healthcare IT to telecare and telehealth. Europe's tech and software companies are prominent players and Europe is the biggest market for mHealth with an estimated \$7bn market size by 2017. There is an opportunity for Ireland to tap into this growing market, developing sensors and communications technologies that facilitate the remote delivery of care and software applications specifically for older consumers, designed to improve the collection of health data and information for practitioners and even the direct provision of care, remotely. Ireland has significant research expertise in its various research centres as well as strong industrial capacity (both indigenous and multinational) and high-quality manufacturing capability of medical devices. There are a few good examples of industry-friendly, test-bed activities with connected actors including the older people as users. The government's eHealth Strategy, under eHealth Ireland, is helping to coordinate clinical and industrial activities.

Connected health is a fast moving space with individual apps or products quickly becoming obsolete as new variants are developed or new approaches to old problems. Product development is also made more expensive by the need to cope with changing expectations around data access and data security, as policy makers and regulators continuously refine the rules to protect against emerging risks. Ireland's health system has a limited capacity at present to test new connected health solutions, which is something of a brake on national innovation on the one hand, and reduces opportunities for would-be exporters to test new concepts and products in their domestic market on the other hand. However progress is being made in terms of developing an infrastructure around the Health Innovation Hub. The fact that public health and care budgets are separate in Ireland reduces the incentive to adopt connected health technologies. The drive towards more integrated health and care would provide the necessary flexibility to enhance adoption rates in connected health. Demand for managed and personalised care is flourishing worldwide offering a large and growing export market for Ireland's businesses to address. Ireland could integrate its already existing technologies and develop interoperable, adaptable and scalable systems to export innovative products to this global market. For example, integration of telecommunication and healthcare will spill over to other areas, e.g., early detection of diseases or medication compliance. The

Irish Longitudinal Study of Ageing (TILDA in TCD) research data could once again help better understand factors relevant to the socio-economic wellbeing of older people and develop smart products and services. Ireland's SMEs have good technologies but may struggle to gain access to strengthening international markets for connected health solutions, which tend to be dominated by institutional customers and large businesses with established supply chains. Government-backed demonstration programmes allow smaller companies to refine their prototypes in real-world settings and showcase their novel products and applications to prospective customers and supply chain partners. By facilitating early market traction and gathering real-world data on the costs and benefits of their innovative technologies compared, Ireland's SMEs will be in a better position to address global markets and supply chains. Exploiting connected medical technologies and chronic disease management systems will ultimately mean cost savings in public health expenditure and hence a significant public sector presence in the potential consumer base is expected in many countries. The government could help remove barriers in a fragmented technology landscape, facilitate the convergence of technologies, and create better incentives for developing and adopting connected health technologies in hospitals and care homes. The following specific actions should be considered:

- **Facilitate multidisciplinary experimentation with novel systems by connecting research, industry, clinicians and users that could lead to new products/services, including linking up with international centres of excellence.**

Innovation in Smaller Business

Support innovation in smaller businesses through public procurement following the US Small Business Innovation Research (SBIR) programmes.

Focusing on smart and connected health. Consider intermediate markets, those between public healthcare and private individuals, such as care homes and sheltered housing. Scale up demonstrator projects to the national level to test system-level innovations and to provide a platform for a larger number of products and services. Ensure the demonstrators give sufficient weight to researching the costs and benefits of the solutions on trial, with a view to supporting prospective exporters in developing their sales pitch and possibly even bringing in international service providers (clients) to see the new systems in action.

Expanding the "Health Innovation Hub" could be a practical way to increase health innovation in general, but targeting older people in particular. Build on existing primary healthcare IT infrastructure and support the development of a national electronic scorecard and telehealth data system for chronic conditions. Create awareness programmes and training for frontline staff and end-users about the benefits of connected health solutions. Explore the feasibility of a health and welfare technologies programme. The introduction of such an innovation programme may be linked to the review of objectives of existing infrastructure. Raise awareness of and support applications for EU funding in areas related to connected health and assisted living. Assisted living 'Assisted living' encapsulates the idea that we want to live our later years socially engaged and as independently as possible and away from hospitals or care homes. Assisted living opportunities are closely linked to 'Connected health', and

‘Adaptable housing’. This opportunity area includes the use of sensors, communication technology, as well as mobility aids, actuators, gaming concept, and human-machine interface to support people’s needs and wishes. The assisted living market is very large globally; in the USA \$41bn was spent on assistive technology in 2011, while the smaller, European market grew 22% to \$525m in 2015. The low consumer awareness and product adoption rates in Europe are expected to change in the near future. The opportunity for Ireland is to develop and commercialise physical and electronic devices connected to communication technologies that enable older people to monitor and manage their health, thereby living longer, healthier and happier in their homes. Ireland has a real research expertise in its various research centres, as well as a strong industrial capacity, especially in high quality manufacturing. There are a few good but somewhat limited examples of industry-friendly test-bed activities exist with older people as active participants. Ireland is also part of the European network of living labs. Ireland could focus on selected areas of assisted living where it has genuine strength. For example, researchers have developed solutions that maintain mobility as key to independence that prevents physical and cognitive decline. Adoption of new technologies by older people will require the development of novel human-machine interfaces and the introduction of gaming concepts (and social connectivity) into everyday tasks.

Integration of assistive technology with the built environment will ultimately result in adaptable ‘smart homes’ for everyone to benefit from. There are current challenges and barriers linked to data security and regulatory issues preventing convergence of technologies and industries (i.e., gaming, entertainment, and health). Coordinate activities across research, industry, clinicians and users to support better design methodologies, to understand data collected about behaviour and needs, and to ensure maximum economic and social benefits. Scale up living-lab projects to the national level in order to demonstrate utility for the end user and profitability for private enterprises on a large-scale. Create an innovation programme in the assisted living space and attract international firms to Ireland to import specialised know-how and technology. Challenge entertainment industry to develop games for older people, linking health benefits and fun. Promote the concept of assisted living, including ‘social inclusion technologies’. Establish training and awareness programmes for designers, entrepreneurs, and end-users. Expand the coverage of national telecommunication and broadband infrastructure is essential.

Adaptable Housing

There is a substantial need for the adaptation of the existing housing stock to better meet the needs of an older population. This international ‘adaptation’ market requires architecture and design services, and such Irish know-how and services may be exported. Products in this space include Modular building systems, Energy efficient building products, intelligent building management systems, Multifunction devices, and Access systems. Although Ireland has a large repair and maintenance industry in the housing sector, it represents predominantly conventional design and construction services. The local authority sector or EU regions are more likely to be able to establish a sizeable and growing market by bringing together adaptable housing and assisted living application areas. There is a large ‘smart homes’ market

in North-America and while Europe's smart home market is much smaller and highly concentrated (around Germany, France, Netherlands), it is growing. Adaptable and smart homes will be the future in the developed world with advantages from saving energy to creating homes suitable for a lifetime. It is noted that older people may not be the direct target as consumers for smart homes, but they will be beneficiaries of this trend. The opportunity for Ireland is to develop the know-how and commercialise the knowledge of smart housing adaptation to support assisted living for older people in their homes. This represents an export opportunity for architectural and design consultancies and specialised manufacturers. Ireland has a design/built environment research base with an interest in adaptation and universal design. Ireland also has tech start-ups and software companies that could develop smart building products or sell into global supply chains for 'smart housing.' Ireland could try to link up adaptable housing with assisted living concepts to develop unique solutions for older people living in homes not suitable to their needs. Design expertise developed in the domestic market may then be exported to the growing European market if privacy concerns and significant installation costs are addressed. The government may consider as a policy objective to provide incentives and support Ireland's design and building products sector in expanding its international sales within the smart homes and retrofit markets in general, and with a specific targeted incentive scheme.

Ireland launched new construction and social housing strategies in 2014, which target building (new and adapted) for older people. Bringing housing and assisted living together to create added value for both application areas is worthy of consideration. Identifying links between 'solutions for adaptable housing' and energy efficiency for older people will also add value. Review the possibility of creating an international competition for adaptive design, for housing and for retrofit, as part of Irish design. This will bring in solutions from around the world as well as building relationships between Ireland's design and construction industries and global. Support efforts around universal design, which are seeking to develop solutions for lifetime homes/lifetime neighbourhoods. Consider supporting the Royal Institute of Architects of Ireland (RIAI) and the Construction Industries Federation in developing working groups to conduct market research and international promotional campaigns. Consider launching a scheme like the SBIR to give greater focus/innovation to that procurement activity. Expand the volume of underpinning research, in both the design space and technology space, perhaps by creating a virtual centre of excellence for 'adaptation in housing for the older person'. Replicate demonstration projects, which bring together the HSE and Local Authorities with designers, academic groups and technology firms to develop and showcase smart buildings and smart building technologies for retrofit. Review planning rules with a view to increasing flexibility in terms of use and reuse of dwellings and mixed use in neighbourhoods. Look at ways to expand the Housing Adaptation Grants scheme, so it is available to a larger number of people.

Tourism

A thriving tourism industry not only offers an economic opportunity, but beyond that it also provides social benefits in Ireland and international reputation. Tourism is an important service traded globally, and it is also an integral component of the enterprise sector in Ireland.

Tourism in Ireland has returned to growth with 7.3m visitors generating €3.7bn in 2014. Most visitors, traditionally from the cohort of people aged 50+, come from the UK and USA and spend mainly on accommodation and food. Nevertheless tourism from Continental Europe is increasingly important and growth from long-haul markets (both developed and developing) is noticeable albeit from a low base. It is recognised that consumer demand has been changing and emphasis is now on visitor 'experience' and niche markets. Ireland can continue to tap into the growing trend of older people travelling abroad, and build on its strong market position in this space. The success of tourism is closely linked to the quality and inclusiveness of systems of transport, ICT, food, and housing. The opportunity for Ireland is to develop globally competitive (smart) tourism market considering visitors needs thereby contributing to economic growth, utilising and enhancing existing capacities in Ireland. Ireland has several attractive points. First, it is readily accessible from Europe and the US via direct air links and it caters well for English-speaking visitors and the Irish Diaspora. Second, the government has made strides with the Irish Short Stay Visa Waiver Programme and the British Irish Visa Scheme to facilitate entry for overseas travellers. Finally, Ireland is a safe and clean destination, often important priorities for people looking for nature-inspired leisure programmes.

Ireland could create a unique experience for people, blending technological innovation, cultural heritage, and natural beauty. An enhanced hospitality dimension of visitors' experience could be achieved with a blend of social interactions with the local communities and cultural heritage. Enhancing tourism services in Ireland by continuing to improve infrastructure, especially in rural areas, linked to the needs of the visitors: accessible transport, visitor friendly hotels and B&Bs, and communication technology is important. Supporting overseas marketing of tourism in Ireland and create a strong image / brand around 'experience', 'cultural heritage', 'environment' and 'wellness' is essential.

- **Continuing to promote 'inclusive' and 'culturally curious' tourism in established markets (UK, US, Germany) as well as for tourists with high disposable income from emerging markets in Asia and South America will pay dividends.** Creating new festivals or extending existing events with the involvement of the entertainment industry, will encourage people return to Ireland as tourists. Offering advice and training to staff on how to build technology into services to older people. Review regulation so that it facilitates the introduction of innovative approaches such as those attractive to older international visitors. Provide specific incentives from government for innovative entrepreneurs to invest in this space both in the short-term, e.g., to build age-friendly hotels, and longer term, e.g. to build a brand in untapped markets. Build networks with other EU regions so that Ireland is part of EU-wide offerings, e.g., via the Irish Regions Office and local authorities town twinning schemes.

Education Continuing Education and Continuing Professional Development

Key activities in the field of education and smart living are organized around the following themes:

- Dedicated training programmes on basic IT skills and computer literacy

- Free online courses or part-time education (in specialized areas) for individuals
- Strategy programmes to increase retention of people in education or engage older people in teaching, learning and research opportunities in higher education.
- Awareness or support programmes for people living with specific challenges such as dementia.

Education is a priority area for a Smart Ireland. Several policy initiatives aim to encourage lifelong learning. Some Higher Education Institutes (HEIs) have introduced a lifelong learning strategy and policy, which may support the participation of citizens in higher education and training programmes. Moreover, HEI strategies should also support people in providing higher education. In practice, education and training and Smart Living in Ireland will largely focus on providing basic IT skills and computer literacy for all citizens. Several enterprises are involved in this sector through the delivery of LCDPs. These training courses are provided on a small scale but there may be space to expand the provision of the training courses across Ireland, especially in rural areas. Aside from the for profit sector, the third sector makes a strong contribution to education and training for older people. A substantial number of NGOs and volunteers are involved in informal education delivery for independent living.

Workforce Planning

It is widely accepted, in Ireland and elsewhere, that citizens will need to participate in the workforce for longer and they need to contribute more towards their pensions if they are to achieve the income they expect or would like to have in retirement. First, while Ireland has a relatively young population, the proportion of older workers as a share of all workers will increase steadily over the next 20 years. Second, there is substantial pressure on public and private pensions in relation to the current inflow of pension contributions. Third, there are substantial skills shortages in certain areas, relating to the numbers of people available to work and the nature of the experience and skills required. Fourth, there are concerns for social wellbeing – with people living longer – many years beyond the typical retirement age in a growing proportion of cases – because older people will need more opportunities to stay connected to their communities and society and participating in work whether paid or voluntary is a good way to address this. Further research is needed to understand what the business community in Ireland is doing to respond to these anticipated demographic changes. Some enterprises are identifying internal opportunities to maintain some of the older workforce engaged under more flexible working conditions. There are substantial opportunities to re-train older people for re-integration into the job market. Lifelong learning programmes are still not emphasizing the opportunity for older people to develop along their career trajectory.

Connectivity and Social Participation

Connectivity and social participation is a priority policy area for Ireland. There are strong links between inadequate social support and an increase in mortality, morbidity and psychological distress and a decrease in overall general health and well-being.

Key Initiatives and activities under connectivity and social participation relevant to smart living include the following:

- **Research links between increased social integration and improved health outcomes and links between social isolation and adverse mental and physical health conditions will guide decision makers.**

Decision-makers, non-governmental organisations, private industry and health and social service professionals can help foster social networks for people by supporting traditional societies and community groups run by, voluntarism, neighbourhood helping, peer mentoring and visiting, family caregivers, intergenerational programmes and outreach services. The third sector plays an important role in this sector, delivering a relatively large number of projects, which are mainly service based. Generally these projects provide support services to citizens and provide the funds to run such services such as volunteer/befriending networks /services. It appears that there is little enterprise in this sector, due to few marketable opportunities.

The population contributes as both consumers and producers in the economy and society and will continue to do so as demographic changes and grows. Lifestyle products and services, tailored to the 50+ age category, including tourism, is a large sector presenting many economic opportunities. There are at present, several products and services that have traditionally been tailored to the older population cohort with further opportunities to increase tailored services, such as 'age friendly hotels' with advances in integrating innovative technology into the hotel, e.g. sensor technology and adapted gyms for physiotherapy. With this in mind, Ireland should focus on research on the use of older people using IT lifestyle products.

Housing and Transport

Housing and transport are priority policy areas and form integral components of Smart Living Housing must aim 'to enable people to live and prosper with confidence, security and dignity in their own homes and communities. Facilitating people to live in well-maintained, affordable, safe and secure homes, which are suitable to their physical and social needs will remain a priority. Supporting the design and development of friendly public spaces, transport and buildings adds real value. Continuing to empower people to live free from fear in their own homes, to feel safe and confident outside in their own communities, and to support an environment where this sense of security is enhanced adds to the quality of life. Transport must aim to 'remove barriers to participation and provide more opportunities for the continued involvement of people in all aspects of cultural, economic and social life in their communities according to their needs, preferences and capacities'. There are two objectives within this goal concerning transport specifically. These include:

- **Promoting access (in terms of affordability, transport availability, accessibility of venue) to a wide range of opportunities for continued learning and education.**
- **Enabling people 'to get out and about' through the provision of accessible, affordable, and flexible transport systems in both rural and urban areas**

Providing specially designed apartments and bungalows to older people and providing assistive technologies to enable independent living should be prioritised. Changing bus routes

to run past hospitals more frequently, providing community transport in the form of a Flexibus service is worthy of consideration.

Research

Solutions to create and shape attractive, sustainable and economically viable urban areas in which citizens, communities and their surroundings can thrive is essential. Ireland has no specific policy on the provision of products or services to the population, however the Irish government's commitment to innovation and the belief that there is an opportunity for Ireland to become a global centre for the commercialisation of technologies, services and products that improve well-being gives Ireland a competitive edge. In this regard, the Programme for Government has committed to progressively implementing the recommendations in Trading and Investing in the Smart Economy (2010).

Lifestyle products and services is a large sector with a lot of potential for further growth. In part, the sector is expected to grow as a result of the increase in the population above 50+. Large commercial opportunities exist in the cosmetics industry and in the sport and recreation and tourism industry.

Governance and implementation

The private sector in Ireland has the innovative and technical capacity to excel and effectively compete in the international arena. Ireland already has a strong presence in many of the application areas considered. Focusing on its relative strengths will help enterprises turn existing knowledge into economic returns. These emerging successful businesses will be underpinned by crucial enabling sectors including the financial services and education. Although the scale of global markets are enormous, very few countries have set up the kind of political leadership Ireland is currently aiming at and which are necessary to help indigenous businesses with niche products and services to successfully enter fiercely contested international markets and maximise the commercial opportunities. Therefore, focused political commitment may be the single most potent action Ireland can take to exploit international opportunities in a coordinated, multi-disciplinary approach.

A central government department is best placed to 'own' Ireland's national 'Smart Living' strategy, as the issues are clearly cross-departmental. In terms of structures, it may be appropriate for the Inter-Departmental Steering Group to be transformed into a standing committee that would bridge departmental interests and deliver the necessary political commitment. An Inter-Departmental Committee on Smart Living deliver leadership and oversight, while leaving the detailed planning and implementation to the most relevant department or agencies. In addition, a Smart Living Leadership Council for Ireland could be set up to engage the private and third sectors, alongside central and local government, to ensure political leadership is mirrored in industry and third sector strategies. SLLCI would develop the detailed Smart Living strategy and drive forward that agenda in multiple policy and industry settings, through advocacy, communication, and coordination. SLLCI would need the authority/capacity to convene and support working groups, with the expertise and resources to drive forward the Smart Living agenda in a specific area. There are a number of cross-cutting (multi-disciplinary and multi-stakeholder) issues that are contingent on the

domestic research organisations, health sector, local authorities, users and enterprise working together in a safe and collaborative environment to develop products and services for people worldwide. Based on an improved national physical and communications infrastructure, Ireland will be able to establish a Smart Living ecosystem that can validate the feasibility and socioeconomic benefits of innovations in the Smart Living space. Consequently, any implementation strategy needs to recognise there are many pre-existing initiatives/investments in Ireland, to which they should add value by galvanising actors around a bigger vision or national agenda. A national Smart Living competition may be an economical model, offering a small number of sizeable and high-profile prizes for major innovations related to different aspects of Smart Living. This could be organised as a 'National Design Challenge' for Smart Living.

Finally, Ireland should consider creating a National Centre for Smart Living, to bring together Ireland's research capabilities across thematic application areas, based on the opportunity areas outlined. A multidisciplinary approach dedicated to Smart Living is currently missing in Ireland that would catalyse, incentivise and operationalize collaborative activities, and help to translate, promote and disseminate the knowledge generated through the various programmes. The new centre would provide a much needed focal point for businesses interested in Smart Living in Ireland. The 'Silver Valley' knowledge hub in Paris could be a model to emulate with a sustainable, public-private partnership business model. Establishing a National Centre for Smart Living even as a 'virtual organisation' will demonstrate Ireland's commitment and help to capture the attention of the wider public as well as the government and business communities. This may in practice be a 'Federation of Centres' working together in the background. Without strong collaboration and participation by community leaders across society we will not reap the rewards of Smart Living policies.

Conclusions

Smart Living is a broad concept that combines innovation and technology to produce products and services to improve the quality of life for all our people. It is based on the assumption that people are potential consumers and will become active direct participants in transforming Ireland for the benefit of the next generations.