



NSAI

ANNUAL REPORT 2021

NSAI TECHNICAL COMMITTEES

INNOVATION MANAGEMENT – NSAI TC45

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1. Chairman's Statement:

2021 was our second year embedded in a global pandemic, it challenged every person in terms of how they worked, lived and survived, and sadly led to an earlier death of many loved ones.

What did emerge is the constant and growing need for innovation, as the pandemic has changed so much - from how we work to how we use technology and the accelerated adoption of digitisation into everyone's lives, and how we interact with customers and fellow workers. In addition, we have all experienced the global climate changes and how that is now driving a very urgent need for change in many traditional practices around sustainability and circular economic mindset. This is creating a stronger demand for more sustainable services and products, and the younger generations are switching suppliers and driving this change more and more each day.

Hence we are living in a time of accelerated and dynamic changes and innovation is the key in terms of having a proven process for any organisation on how to systematically set-up and implement these required changes. These developments have set up 2022 as a year for accelerating these changes and bring significantly better solutions to the people and the planet - so all can benefit, using a systematic (versus ad hoc) innovative process and framework.

During 2021, our TC45 team continued to successfully set the foundation for innovation with policy and program makers through ISO 56002 and other related standards across the ISO 56000 series. Some key milestones during 2021 included:

1. Enterprise Ireland and IDA both launched pilot programs around their Innovation Management (IM) Scorecards aligned to ISO 56002 (innovation management system – guidance), ISO 56005 (IP management) and others in the ISO 56000 series – while also providing related support funding for innovation consultant interventions to support their SME and MNC client companies. Over 200 Enterprise Ireland client companies completed the IM Scorecard, and circa 50 IDA client companies completed the IDA scorecard.
2. Enterprise Ireland and IDA issued a call for Innovation consultants to be part of this pilot, and also ran workshops for these consultants to ensure alignment with ISO 56002 principles in any client company intervention. These workshops were re-run for internal members of both organisations.
3. The ISO based innovation scorecard was also adopted by the innovation team within DPER, and hence across their large and growing Public Service innovation network. DPER also funded projects within the public service via their innovation fund to drive a mindset for innovation internally across all government departments and agencies. The DPER-supported public service innovation network now has over 850 members and over 130 representatives driving this agenda internally. Colin Flaherty, leader of the DPER innovation team, also joined NSAI TC45 during the year, taking the place of Breda O'Brien on the committee as Breda moved to a new role.
4. In April 2021, we formally launched the new ISO 56005 Intellectual Property Management guide standard nationally – a powerful resource for SMEs on how to identify, capture and extract value from their IP assets, as an integrated part of a good innovation management system.
5. CEAI, The Community Enterprise Association of Ireland (formerly NACEC) started Phase 2 of their program to bring a unique combination of insights from both ISO 9001 and ISO 56002 - Quality Management and Innovation Management - to their network of all innovation hub members nationally (community, public, private and HEI remote working hubs, facilities and start-up incubators) under a steering committee led by Minister Damian English, and including senior representatives from NSAI, EI, Western Development Commission (WDC) and other key innovation stakeholders nationally.
6. We also actively engaged in the design and development of a new ISO 56001 standard (innovation management system - requirements), which will be a certifiable Innovation Management System Standard. This work formally commenced in early 2021 and our TC45 mirror committee members were actively involved in all aspects - as part of driving this key agenda in Ireland, but also playing on a global stage in terms of carefully defining what appropriate best practice is, and best high level guidance, for any organisation or company who want to implement an innovation management system that can be certified either internally and/or via independent 3rd party certification organisations.
7. In parallel we continued our ongoing collaborations with Sweden, as a direct consequence of our early work on the ISO guide standards. Our NSAI colleagues also worked closely with RISE (Research Institutes Sweden) to develop a joint certification program for individuals as 'innovation management professionals' which will be launched in Q2 2022 between NSAI and RISE. This is to encourage people in companies and public sector

- organisations to upskill, be certified and be acknowledged as innovation champions as part of their career development pathway.
8. Also, members from the committee founded 'Innovate Island' (<https://www.innovateisland.net/>) - an open organisation of like-minded people interested in innovation. Every month the group having invited guests, from industry nationally and abroad, to share their experiences and approaches around innovation and its many challenges. Again, we are expecting to see significant developments in this 'community of practice' during 2022 and beyond – including in relation to the practical deployment and application of the ISO 56000 series across all organisations in all regions across the island of Ireland.
 9. During 2021, NSAI (via our TC45 committee manger) presented to the 'National SME and Entrepreneurship Growth Plan' implementation group co-ordinated by DETE. This new action plan was published in January 2021 (based on the earlier OECD report on 'SME and Entrepreneurship Policy in Ireland') and includes a specific action around the promotion and deployment of the ISO 56000 Series for the benefit of SMEs. The TC45 committee manager presented on the above in the context of TC45 related work and also more broadly on the benefits of standards for SMEs and related NSAI supports.
 10. During 2021, the TC45 committee manager also worked closely with his NSAI PR colleagues to develop and launch two new NSAI websites related to innovation. Firstly, a general website on 'Standards + Innovation' (<https://www.nsai.ie/standards/standards-innovation/>). This site includes sections for 'Researchers' and 'Innovators', as well as a series of inspiring 'Success Stories' or case studies on how 'standards + innovation' has resulted in real impact for companies, their customers and the broader innovation system. The site also includes a section on 'Awards' (National via NSAI, and European via CEN CENELEC) that recognise organisations and individuals that have successfully integrated 'standards + innovation' to deliver positive socio-economic and environmental impacts. Past winners include 3 members of our TC45 committee. The second site is focused on NSAI TC45 and the ISO 56000 Series (<https://www.nsai.ie/standards/sectors/innovation-management-standards/>). It includes an introduction to the ISO 56000 Series of standards, a 'useful links' section with the latest version of this 'NSAI TC45 Annual Report'; a link to the ISO Innovation Management Technical Committee homepage (ISO TC279); and a copy of the NSAI brochure on the ISO 56000 series.

More work similar to the above is promised during 2022 and beyond, as we continue to support and enable the Government growth plan for SMEs - where Innovation is key in supporting SMEs to identify, validate and deliver the required outcomes of new scalable growth for Ireland.

Finally, many thanks to all our committee members for their commitment and hard work invested in this process and as key 'TC45 Team Members' and 'community-of-practice' experts helping to create the ISO 56000 series as a foundation stone to change mindsets and create more opportunities for growth in all types of organisations across all regions, nationally and beyond.

Sean McNulty, Chair of NSAI TC45 on Innovation Management

2. Introduction

Standards on innovation management will allow International and Irish organisations, particularly SMEs, to share best practices across various aspects of innovation management. This will facilitate collaboration, and also develop the capability of Irish-based companies to innovate and to bring new innovations successfully to competitive global markets.

Innovation is key to global competitiveness and human and technological progress over the coming decades, particularly in the context of the required twin green and digital transformations. International management system standards on innovation will help break down the existing cultural, structural and organisational obstacles within and between organisations. These new ISO standards will provide best practices to support the implementation of innovation policies and best practices in SMEs, public institutions, universities, research & innovation centres and non-profit organisations.

To achieve this goal, the work focuses on a management system for innovation, with supporting 'Tools & Methods'. The ISO 56000 Series of Innovation Management guidance standards address: terminology, tools and methods such as open innovation partnerships, design innovation, strategic intelligence, intellectual property management, creativity/idea management; measurement of innovation; and also the assessment of innovation management practices in all types of organisations.

3. Scope of TC

The NSAI TC 45 technical committee mirrors the following European and International committees:

Committee Name	Committee Title
ISO/TC 279	<p>Innovation Management</p> <p>This is now the active international TC on Innovation Management, following on from the initial work of CEN TC 389.</p> <p>Refer to following section below for details on structure, work programme etc.</p> <p>In summary, the current ISO TC 279 working groups are as follows:</p> <ul style="list-style-type: none"> - WG1 "Innovation management system" - WG2 "Terminology, terms and definitions" - WG3 "Tools and methods" - TF1 Taskforce for SME Handbook on ISO 56002
CEN/TC 389	<p>Innovation Management</p> <p>This CEN committee produced the 7-part Technical Specification: CEN/TS 16555 Parts 1-7</p> <p>NOTE: The European Technical Specifications are being replaced by their ISO 56000 series equivalents by the adoption of the relevant ISO 56000 series guidance standards as ENs (European Norms / Standards) over the coming months and years.</p>

4. Structure and Membership

4.1 Structure

The table below illustrate the latest official structure of the ISO TC 279 Committee, which is mapped directly by NSAI TC45.

STRUCTURE
LIAISONS
MEETINGS

REFERENCE ↓	TITLE
ISO/TC 279/STTF ⓘ	Spanish translation task force
ISO/TC 279/TF 1 ⓘ	Taskforce for the Handbook ISO 56002
ISO/TC 279/WG 1 ⓘ	Innovation management system
ISO/TC 279/WG 2 ⓘ	Terminology, terms and definitions
ISO/TC 279/WG 3 ⓘ	Tools and methods

4.2 Members

The table below includes the NSAI TC 45 members during the year.

Name	Organisation	Committee Role
Sean McNulty	Dolmen Design & Innovation (Managing Director, Dolmen)	Chair
Joe Doyle	Enterprise Ireland (Intellectual Property Manager, EI)	Member
Dave Feenan	ICT Skillnet & Technology Ireland Innovation Forum (Manager)	Member
Stephen Smith	Innovation Consultant	Member
Dr Bill O'Leary	J&J Depuy Synthes	Member
Eoin Flavin	Innovation Consultant	Member
Prof Gerry Byrne	Innovation Consultant GBI Ltd.	Member
Mary White (Tomey)	Evoquent IP	Member
Nikos Minas	Hanna Moore + Curley, IP Attorneys (European Patent Attorney, IP Strategy lead)	Member
Keith Finglas	Innovation Delivery Ltd. Innovation Consultant	Member
Leo Clancy	IDA Ireland (Head of Technology, Consumer & Business Services)	Member
Charlie Tuxworth	Innovate XL Innovation Consultant	Member
Alan Doherty	Citi Innovation Lab Dublin (Head of Innovation Design)	Member

Dr Peter Robbins	DCU Business School (Assistant Professor)	Member
Dave Townley	CTO Neurent Medical	Member
Colm O Rourke	NSAI Medical Devices (Industry Engagement)	Member
Dr Anu Sahni	National College of Ireland / NCI (Program Director Innovation & Commercialisation)	Member
Aideen O'Hora	SustainabilityWorks (Business & Innovation Consultant)	Member
Derek Bridges	Ariadne Consultants	Member
Helen Burke	IDA	Member
David Walsh	NSAI - Market and Regulatory Support	Member
Breda O'Brien	DPER Innovation Team	Member
Adrian Cronin	Ervia	Member
Kathryn Lynch	Chronos Consulting	Member
David Keeley	Enterprise Ireland	Member
Sven Spollen-Behrens	SFA (Small Firms Association, Ibec)	Member
Gary O'Meara	NACEC - National Association of Community Enterprise Centres	Member
Paul Gilsean	Abcon Ireland	Member
Joan Hyland	Mergon	Member
James Hubbard	Centre for Excellence in Universal Design, National Disability Authority	Member
Clare Dillon	NuaWorks	Member
Chantelle McCann Kiernan	IDA (Innovation team)	Member (new 2021)
Fiona Delaney	Origin Chain Networks	Member (new 2021)
Paul Ward	Bord Iascaigh Mhara (BIM)	Member (new 2021)
Eleanor Forrest	Enterprise Ireland - LEO Policy & Co-ordination Unit	Member (new 2021)
Siobhan Finn	NACEC - National Hub Network Manager <i>NOTE: NACEC recently rebranded as CEAI - Community Enterprise Association Ireland</i>	Member (new 2021)
Paul O'Reilly	TU Dublin	Member (new 2021)
Pat Reidy	SFI Confirm – Smart Manufacturing RDI Centre	Member (new 2021)
George Onofrei	Letterkenny IT	Member (new 2021)
Kathryn Cormican	NUIG	Member (new 2021)
Yassine Jelassi	Commercialisation Manager CeADAR	Member (new 2021)
Stephen O'Driscoll	SFI Challenges Research Manager	Member (new 2021)
Patrick Reidy	SFI Confirm	Member (new 2021)
Claire McBride	TU Dublin	Member

		(new 2021)
Colin Flaherty	DPER, Innovation Team	Member (new 2021)
William Egenton	Dromone Engineering	Observer
Bernadette McGahon	IRDG	Observer
Laurence Knell	Innovation Consultant	Observer
Paul Killeen	NSAI	Committee Manager

New Members, 2021

As outlined in the table above, 14 new members joined NSAI TC45 during 2021.

Early in 2021, Aileen Deasy moved from Bord Iascaigh Mhara (BIM) to Fáilte Ireland in an innovation leadership role. Sean, Paul and all TC45 members wished Aileen well in her new role, thanked her for her active engagement and contributions to TC45 over the past years, and stated that they hope to see Aileen back as a TC45 member again in future representing Fáilte Ireland. As outlined in the table above, Paul Ward took Aileen's place as BIM representative on TC45.

4.3 Liaison Organisations, ISO TC 279

ORGANIZATIONS IN LIAISON (CATEGORY A AND B)

ACRONYM ↓	TITLE ↓	CATEGORY ↓
CERN	European Organization for Nuclear Research	A
EPO	European Patent Office	A
FICPI	Fédération Internationale des Conseils en Propriété Intellectuelle	A
ISPIM	International Society for Professional Innovation Management	A
LESI	Licensing Executives Society International	A
OECD	Organisation for Economic Co-operation and Development, OECD	A
The World Bank	The World Bank Group	A
UNDP	United Nations Development Programme	B
UNESCO	United Nations Educational, Scientific and Cultural Organization	A
UNIDO	United Nations Industrial Development Organization	A
WIPO	World Intellectual Property Organization	A
WTO	World Trade Organization	A

As illustrated above, during 2021 ISO TC 279 had active liaison relationships with key international players in Innovation Management, including OECD, EPO, WIPO, UNESCO, UNIDO, LESI, World Bank and others who are actively following and participating in the ISO TC279 work programme. For example, the future revised version of the influential and highly cited OECD Oslo manual on innovation will be aligned with the outputs from ISO TC279. Many countries (48 Participating and 19 Observing members during 2021) are also heavily involved in ISO TC 279 work programme, such that ISO believe the outputs from ISO TC 279 could well be the basis for 'the next ISO 9000 series' of key International management system standards, to support the systematic management of innovation systems in organisations of all types and sizes globally.

5. Summary of 2021 Activities

5.1 Meetings & Events

Committee members attended the following national and International meetings and events during the year, including via strong attendance via our NSAI TC45 experts and national delegations at the various ISO TC279 meetings outlined below:

Date	National & International Meetings & Events
19-Jan-2021	N338 – NSAI TC45, Minutes & Actions
18-Feb-2021	N339 - ISO TC279 WG1, Plenary (Virtual), Minutes
26-March-2021	N348 - NSAI TC45, Minutes & Actions
26-April-2021	National launch of ISO 56005 on IP Mngt https://www.nsai.ie/about/news/intellectual-property-strategy-for-smes/ Event Title: <i>Intellectual Property Strategy for SMEs: How ISO 56005 can support innovation in your business.</i> <i>*See event flyer below</i>
14-May-2021	N353 - NSAI TC45, Minutes & Actions
23-Sept-2021	N375 - NSAI TC45, Minutes & Actions
20-Oct-2021	N359 - ISO TC279 Plenary (Virtual), Resolutions
Ongoing	Training: NSAI Committee manager provided training on ISO standards development process and related online Livelink document management & alerts system for new TC45 members

5.2 National Work

See summary of national meetings and events in table above, and the additional information and updates below.

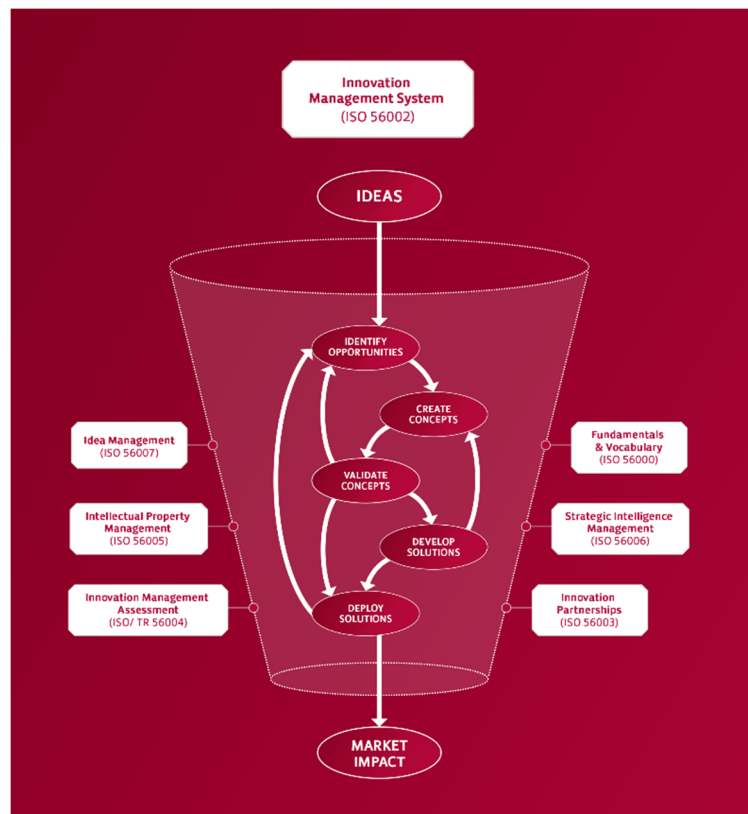
New NSAI Websites on Innovation

During 2021, Paul Killeen as committee manager worked closely with his NSAI PR colleagues to develop and launch 2 new NSAI websites related to innovation, as follows.

- **General website - 'Standards + Innovation':**

- <https://www.nsai.ie/standards/standards-innovation/>
- This site includes a short overview video developed by the EC-funded 'BRIDGIT' project on 'standards + innovation' that targets a broad audience and explains the benefits of integrating 'standards + innovation' in general. The site also has sections for 'Researchers' and 'Innovators', as well as a series of inspiring 'Success Stories' or case studies on how 'standards + innovation' has resulted in real impact for companies, their customers and the broader innovation system – including RDI Centres that collaborate with Start-ups, SMEs and MNCs on research and innovation projects. Several great Irish success stories are also highlighted, as follows:

- **OPENET:** An Irish telecoms company that scaled and attracted large investment due to its active engagement in 3/4/5G telecoms standards & related products
- **ADAPT:** How the SFI funded research centre ADAPT uses standardisation to make sure that their research is applicable to the real world
- **ORIGIN CHAIN NETWORKS:** An Irish start-up (and recent new member of NSAI TC45) using Blockchain to create agri-food supply chain solutions, and the winner of the European 'Standards + Innovation' awards in 2020
- **COVID19 FACE COVERINGS:** How the research community in Ireland enabled key new European standards for community face coverings - resulting in improved protection for users regardless of age, size or ability, in Europe and globally.
- The page also includes a section on 'Awards' (National via NSAI, and European via CEN CENELEC) that recognise organisations and individual researchers and innovators that have successfully integrated 'standards + innovation' to deliver socio-economic and environmental impact at scale – nationally, regionally at European level and internationally. The website has a 'Get Started' section where people can find out how to get involved with standardisation. There is also a direct link to an ISO 56000 series page, entitle 'what about innovation management system standards', which brings one to the dedicated page discussed below
- **Website on NSAI TC45 and ISO 56000 Series:**
 - <https://www.nsai.ie/standards/sectors/innovation-management-standards/>
 - The above site includes an introduction to the ISO 56000 Series of standards, including the overview diagram below:



- The site also includes a list of the published and ‘in-progress’ ISO 56000 series standards, and a ‘useful links’ section with the latest version of this ‘NSAI TC45 Annual Report’; a link to the ISO Innovation Management Technical Committee homepage (ISO TC279); and a copy of the NSAI brochure on the ISO 56000 series (from which the ‘innovation funnel’ diagram above is taken)

The NSAI committee manager requested that all TC45 members review both sites above and actively promote and forward the links to their national RD&I contacts & networks. NSAI also welcomes any feedback on the content of the sites, including any suggestions for changes, additions etc

ISO Intellectual Property (IP) Management Standard – National Launch Event

A task force team under TC45 planned and delivered a very successful ‘National Launch’ of ISO 56005 on IP Management on 26th April 2021, to coincide with world IP day. As outlined in the event flyer below, the team members and participants included Joe Doyle (IP Manager, Enterprise Ireland and long standing member of TC45), Mary White (Evoquent IP and member of TC45), Nikos Minas (European patent attorney, Hanna Moore & Curley and TC45 member), Katheryn Lynch (Chronos Consulting & TC45), and Paul Killeen (NSAI) - with great support provided by the NSAI PR team. The title of the event was ‘*Intellectual Property Strategy for SMEs: How ISO 56005 can support innovation in your business*’, and the webinar was facilitated by Joanne Griffin of AdaptIQ solutions, with SME participants Jennifer Roper (Precision Biotics) and Richard Shattock (Health Beacon).



The flyer features the NSAI and Enterprise Ireland logos at the top. The title 'Intellectual Property Strategy for SMEs: How ISO 56005 can support innovation in your business' is prominently displayed in red and black text. Below the title, the date and time 'Monday, 26th April @ 11am' are listed. A large red button with white text says 'Watch it back'. At the bottom left, it says 'Watch on YouTube' with the YouTube logo. On the right side, there is a vertical list of speakers with their photos and names: Paul Killeen (Standards Development, National Standards Authority of Ireland), Joe Doyle (Intellectual Property Manager, Enterprise Ireland), Mary White (Irish & EU Trade Mark & Design Attorney, Evoquent), Nikos Minas (European Patent Attorney, Hanna Moore + Curley), Joanne Griffin (Founder & CEO, AdaptIQ Solutions), and a group of SME stories from Jennifer Roper (Precision Biotics) and Richard Shattock (Health Beacon). A play button icon is centered over the speaker list. A 'Copy link' button is in the top right corner.

The participants discussed the fact that intellectual property (IP) can be daunting for many Irish SMEs. They may not be able to identify the IP in different areas of their business, let alone know how to create and implement a successful IP strategy to create real business value from the systematic management of their key intellectual assets. The speakers, including the SME participants, explained how the new ISO 56005 can help address these challenges as it is a new guidance framework for SMEs to effectively manage the IP that supports and protects their innovation. Forming part of

the ISO 56000 Innovation Series of Guidance Standards developed by leading international IP experts (including our NSAI TC45 experts), all felt the document will be a valuable resource and practical tool for Irish companies navigating through the world of Intellectual Property management. In summary, the webinar demonstrated how good IP management - a typical pain point for innovators - can now be streamlined thanks to this new ISO Standard.

A video of the webinar is available at <https://www.nsaie.ie/about/news/intellectual-property-strategy-for-smes/>, together with related reference slides that provide an overview of the entire ISO 56000 Series (including ISO 56005 on IP Management); how the series was developed; its use as a guidance framework for systematic innovation management & performance for SMEs; and the use of the ISO 56000 series as an innovation platform in support of various national innovation initiatives, and in support of the global digital & green transformations. The slides also include links to the two new NSAI standards collections (published standards in the ISO 56000 series) that were developed and launched at significantly discounted prices as part of this national event, as well as references to the OECD report on 'SME and Entrepreneurship Policy in Ireland' that highlights the key role of standards in supporting SME competitiveness and internationalisation.

National SME and Entrepreneurship Growth Plan

NSAI TC45 actively supporting both the development and implementation of the 'National SME and Entrepreneurship Growth Plan' since its publication in January 2021; which was based on the OECD report on 'SME and Entrepreneurship Policy in Ireland' that was launched in October 2019 - to which the NSAI TC45 committee manager also contributed to directly via a series of multi-stake holder meetings with the OECD team and various other Irish groups and agencies engaged in supporting SMEs and Start-ups across Ireland.

Specifically in terms of the 'National Growth Plan' alluded to above, NSAI Standards, via NSAI TC45, has been supporting the implementation of the following action:

Action 2.4.2: Promote the use of the ISO 56000 Innovation Management Standards by SMEs through awareness building and education to encourage a wider view and understanding of innovation and grow innovation capability and culture within SMEs

For example, during 2021, TC45 led the national launch of the key ISO guidance standard on Intellectual Property Management (ISO 56005) as discussed earlier - via a webinar including expert members from NSAI TC45 (3 Irish-based IP experts who contributed strongly to this ISO guidance standard, and the NSAI committee manager) together with 2 Irish SMEs who were very supportive of how this new standard will help them and all other innovation-active SMEs across Ireland.

NSAI TC45 also supported and enabled the training of Irish innovation consultants that EI and IDA are now actively using to support their SME clients on their innovation journeys. Most recently during 2021, NSAI partnered with RISE (Research Institutes Sweden) on the certification of management professionals who will support SMEs nationally - with plans to launch this joint NSAI/RISE initiative in Q2 2022. During 2021, NSAI (via the TC45 committee manager) also presented on the above action 2.4.2 (and more broadly on the benefits of standards for SMEs and related NSAI supports) to the core 'SME Plan Implementation Group' via DETE.

5.3 International/Regional Work & Standards Reviewed and Voting Results

Published International Standards

During 2021, the following ISO standard was published:

- ISO 56006:2021 Innovation management - Tools and methods for **strategic intelligence management** - Guidance

Ballots & Voting Results

Reference	Title	Decision
ISO AWI 56001	Proposed resolution for parallel development with CEN of ISO AWI 56001 under ISO lead (under Vienna Agreement)	Approved
prEN ISO 56001	CEN TC389 - Adoption NewWI prEN ISO 56001	Approved
prEN ISO 56005	CEN TC389 - Adoption NewWI prEN ISO 56005	Approved
ISO/DTS 56010	ISO/DTS 56010 - Illustrative examples of ISO 56000	Approved (with comments)
ISO/FDIS 56006	ISO/FDIS 56006 - Strategic Intelligence Management	Approved
ISO/CD 56007	ISO/CD 56007 - Idea Management	Approved (with comments)

A summary of some of the **key ISO TC279 (and related NSAI TC45) developments during 2021** are included below:

- It was agreed that WG1 of ISO TC279 will develop **ISO 56001**
 - 56001 will be a 'requirements-based' or 'type A' Management System Standard/MSS that can be used for certification of organisations in the future (as against the existing 56002, which is for 'guidance' only, and hence a 'type B MSS')
 - Leo Colombo (of Argentina) was re-appointed as WG1 convenor
 - 3 new task groups (TGs) were established under ISO WG1 as follows:
 - TG1 – drafting of 56001; TG2 - validation of 56002; and TG 3 – Communications.
 - NSAI TC45 established matching TC45 TGs, as follows:
 - TG1: ISO 56001 Drafting
 - Sean McNulty (lead), Eoin Flavin, Joan Hyland

- TG2: Validation Project (56002) & RISE/Sweden request re 'ICP4IMS' (International Collaboration Platform for IMS)
 - Paul O'Reilly & Claire Mc Bride (lead), David Keeley, Siobhan Finn
- TG3: Communications & Messaging
 - Kathryn Lynch (lead), Charlie Tuxworth, Dave Feenan
- Proposed ISO 56001 development timeline, as follows: Committee Draft (CD) ballot, 2022-03; DIS submission, 2023-03; Publication, 2024-02
- NSAI TC45 members provided substantial inputs & comments on the proposed [structure](#) of 56001
- The NSAI TC45 members promoted the EI (and IDA, DPER) 'Innovation Scorecard' based on ISO 56000 Series as a potentially powerful case-study for ISO (and Ireland) via the new ISO TC279 WG1 TG2 tasked with validation of ISO 56002 (a particularly powerful example for ISO TG2 given EI success in deploying the scorecard across its SMEs clients during 2021)
- Eoin Flavin of TC45 and co-editor of evolving **ISO 56007 (Idea Management)** under ISO TC279 WG3
 - Eoin co-ordinated inputs and comments with group of interested NSAI TC45 members (Charlie Tuxworth, James Hubbard, Sean McNulty)
 - 56007 addresses the first 3 of the 5 IMS sub-processes defined in 56002:
 - Identify Opportunities; Create Concepts; Validate Concepts
(i.e. it does not address 'develop solutions' or 'deploy solutions')
- Johan Claire of France (leader of ISO TC 279 TF1 on '**SME Handbook**', and close collaborator with NSAI TC45) created a '**serious game**' based on the ISO 56000 series, and [presented a demo](#) of his game at a TC45 meeting in March 2021.
- NACEC/CEAI (**Community Enterprise Association Ireland**) presentation - plans for ISO 56000 Series:
 - Gary O'Meara of CEAI presented / discussed their plans to incorporate ISO 56000 series (and ISO 9001) into their strategic and operational plans during 2021 and beyond, to enable both innovation management and operational excellence best practices across the CEAI network
 - Sean McNulty and Paul Killeen worked closely with Gary, Siobhan Finn and team during 2021 to support the above national initiative linked to the national SME Growth Plan
- Breda O'Brien (DPER Innovation unit) gave a [presentation on Public Service Innovation](#), including:
 - The **Public Service Innovation** Team, 2019-2021
 - Public service innovation fund; 52 Projects funded in first 2 years
 - Innovation communication & network of over 850 members, including 131 Innovation Reps
 - Innovation Declaration & Innovation Skills
 - Innovation Scorecard (based on ISO 56000 Series)
 - Public Service Innovation Strategy & Innovation Week
- **Innovate Island** – During the year, Charlie Tuxworth, Eoin Flavin and Kathryn Lynch updated the TC45 members on this new network of innovation practitioners which was established during 2021, modelled on a similar network in Sweden whose founding members work closely on the development of the ISO 56000 series via the Swedish National Standardisation Body, SIS. Magnus Karlsson (chair of Swedish national innovation committee and very active in ISO TC279) presented to Innovate Island on the equivalent Swedish network of innovation practitioners.

- **Consultancy call for ‘Innovation Management Professionals’**
 - David Keeley of Enterprise Ireland (EI) and TC45 updated the TC45 members on an EI initiative to train innovation consultants on the ISO 56000 series so that they can support EI clients in adopting the best practices outlined via ISO 56000 series of guidance standards.
- **Collaborations – National & Sweden / Research Institutes Sweden (RISE)**
 - ISO 56000 Series + Innovation Scorecard Pilots via EI, IDA & DPER
 - *To-date (end 2021), 221 scorecards have been completed by EI clients, 45 by IDA client companies*
 - ISO 56000 Series + Research on Innovation Management Systems (RISE & TC45 Academics)
 - ISO 56000 Series + CEAI
 - *NACEC rebranded as CEAI (Community Enterprise Association Ireland)*
 - ISO 56000 Series + Certification of Innovation Management Professionals
 - NSAI initiated and progressed plans for new joint NSAI/RISE certification of Innovation Management Professionals

6. Irish Publications/Reviews

NSAI adopted the following ISO 56000 series standards deliverables during the year:

- I.S. EN ISO 56000:2021 - Fundamentals and Vocabulary
- I.S. EN ISO 56002:2021 - Innovation Management System - Guidance
- I.S. EN ISO 56003:2021 - Innovation Partnership – Guidance

NSAI also developed a ‘package’ or ‘Collection’ of all the published ISO 56000 series standards at a discounted price. This collection was officially launched during the ISO 56005 IP launch event discussed earlier. See link below to this new NSAI collection:

- [ISO 56000 Collection 1:2021](#)
 - This collection includes all 5 of the ISO 56000 series standards published to-date at the significantly reduced ‘collection price’ of €250.
 - Innovation Management collection includes: I.S. EN ISO **56000**:2021 (fundamentals); I.S. EN ISO **56002**:2021 (IMS, guidance); I.S. EN ISO **56003**:2021 (partnerships); S.R. CEN ISO/TR **56004**:2020 (assessment) & ISO **56005**:2020 (IP management)

7. Innovation Awards

7.1 European ‘Standards + Innovation Awards’ 2021 - Irish Nominees

In 2021, NSAI nominated the following experts for the ‘Individual’ awards ‘standards + innovation’ award at European level via CEN CENELEC:

- Dr. Pamela HUSSEY & Dr. Subhashis DAS – CeIC (Centre for eIntegrated Care), SFI ADAPT Centre, Dublin City University
- Dr Steven DARBY - ‘Centre for Advanced Photonics and Process Analysis’ (CAPPA), Munster Technological University

For an overview of the above nominations and related work, please refer to the CEN CENELEC awards website below:

- <https://www.cencenelec.eu/get-involved/research-and-innovation/cen-and-cenelec-activities/standards-innovation-awards/list-of-nominees-2021/>

7.2 NSAI Standards Innovation Award 2021

- Annual NSAI award for the integration of standards development and innovation in Irish-based organisations, to support competitive advantage for Irish companies in global markets – per the Innovation 2020 national RDI strategy
- This award is presented during the annual NSAI Standards Forum event
- The 2021 Innovation award went to:
 - Dr Steven Darby and team from the ‘Centre for Advanced Photonics and Process Analysis’ (CAPPA) in Munster Technological University.
 - Award for research that informed key new NSAI and European standards for community face coverings in the context of the COVID 19 pandemic

For a summary of all past winners of the above award, refer to the NSAI website below:

- <https://www.nsai.ie/standards/standards-innovation/awards/>


8. Work programme - 2022 onwards

The NSAI TC45 strategy is to continue to actively engage in the development of the various emerging ISO TC 279 standards over the coming year and beyond, and in parallel to actively promote the use and deployment of this key series of innovation management standards across all regions of Ireland for the benefit of organisations of all types and sizes, both public and private.

Below is a summary of the current approved work programme of **draft standards** under development via ISO TC 279.

STANDARDS BY ISO/TC 279		
Innovation management		
Filter: <input type="checkbox"/> Published standards <input checked="" type="checkbox"/> Standards under development <input type="checkbox"/> Withdrawn standards <input type="checkbox"/> Projects deleted Filter the list		
STANDARD AND/OR PROJECT UNDER THE DIRECT RESPONSIBILITY OF ISO/TC 279 SECRETARIAT (s)	STAGE	ICS
ISO/AWI 56000 Innovation management — Fundamentals and vocabulary	10.99	
ISO/AWI 56001 Innovation management — Innovation management system — Requirements	20.00	
ISO/DIS 56007 Innovation management — Tools and methods for idea management — Guidance	40.00	03.100.01 03.100.40
ISO/CD 56008 Innovation management — tools and methods for innovation operation measurements — Guidance	30.20	03.100.01 03.100.40
ISO/DTS 56010 Innovation management - Illustrative examples of ISO 56000	30.92	03.100.01 03.100.40

The **published standards** in the series are as follows:

 STANDARDS BY ISO/TC 279		
Innovation management		
Filter: <input checked="" type="checkbox"/> Published standards <input type="checkbox"/> Standards under development <input type="checkbox"/> Withdrawn standards <input type="checkbox"/> Projects deleted		
STANDARD AND/OR PROJECT UNDER THE DIRECT RESPONSIBILITY OF ISO/TC 279 SECRETARIAT (6) ↓		
	STAGE	ICS
ISO 56000:2020 Innovation management — Fundamentals and vocabulary	90.92	01.040.03 03.100.01 03.100.40
ISO 56002:2019 Innovation management — Innovation management system — Guidance	60.60	03.100.01 03.100.40 03.100.70
ISO 56003:2019 Innovation management — Tools and methods for innovation partnership — Guidance	60.60	03.100.01 03.100.40
ISO/TR 56004:2019 Innovation Management Assessment — Guidance	60.60	03.100.01 03.100.40
ISO 56005:2020 Innovation management — Tools and methods for intellectual property management — Guidance	60.60	03.140 03.100.01 03.100.40
ISO 56006:2021 Innovation management — Tools and methods for strategic intelligence management — Guidance	60.60	03.100.01 03.100.40

A particular focus of the NSAI TC45 team during 2022 will be continued inputs into the development of the ISO draft standards listed above, and related national roll-out and promotion of these and other published ISO 56000 series standards. Such a broad and ongoing national roll-out will support and enable NSAI actions under Innovation 2020 (the national research & innovation strategy, and its planned successor) and the national vision therein of positioning Ireland as a 'Global Innovation Leader'. The widespread introduction of systematic - versus ad-hoc - innovation management practices as outlined in the ISO 56000 series will also help indigenous Irish SMEs to deliver much needed improvements in productivity and international competitiveness and exports – as outlined in the OECD report on SME Productivity in Ireland published in 2019, and the directly related and current national SME & Entrepreneurship Growth plan being led by the Department of Enterprise Trade & Employment (DETE) , including the specific action below:

Action 2.4.2: Promote the use of the ISO 56000 Innovation Management Standards by SMEs through awareness building and education to encourage a wider view and understanding of innovation and grow innovation capability and culture within SMEs

NSAI TC45 will also continue to work closely with our international community of experts & colleagues within ISO TC279 to support and enable the above strategy and actions, including working with our close collaborators in Sweden and Research Institutes Sweden, RISE.