ISO/TMB "Technical Management Board"
Secretariat: **ISO**
Secretary: **Rossi Marco Mr**

Form 04 NP on Digital Legacies

Document type	Related content	Document date	Expected action
General / Other		2023-03-15	

NEW WORK ITEM PROPOSAL (NP)

DATE OF CIRCULATION:
Click here to enter a date.

PROPOSER:
☒ ISO member body:
Australia

☐ Committee, liaison or other:
Click or tap here to enter text.

CLOSING DATE FOR VOTING:
Click here to enter a date.
REFERENCE NUMBER:
Click or tap here to enter text.

☐ **WITHIN EXISTING COMMITTEE**
Document Number: Click or tap here to enter text.
Committee Secretariat: Click or tap here to enter text.

☒ **PROPOSAL FOR A NEW PC**

A proposal for a new work item within the scope of an existing committee shall be submitted to the secretariat of that committee.

A proposal for a new project committee shall be submitted to the Central Secretariat, which will process the proposal in accordance with ISO/IEC Directives, Part 1,Clause 2.3.

Guidelines for proposing and justifying new work items or new fields of technical activity (Project Committee) are given in ISO/IEC Directives, Part 1, Annex C.

IMPORTANT NOTE: Proposals without adequate justification and supporting information risk rejection or referral to the originator.

PROPOSAL
(to be completed by the proposer, following discussion with committee leadership if appropriate)

English title

Digital legacies

French title

Click or tap here to enter text.

(Please see ISO/IEC Directives, Part 1, Annex C, Clause C.4.2).
In case of amendment, revision or a new part of an existing document, please include the reference number and current title

SCOPE
(Please see ISO/IEC Directives, Part 1, Annex C, Clause C.4.3)

The Standard will provide guidance on how to manage a person's digital accounts and assets after death and provide clarity as to what consumers' rights are in relation to their digital media.

PURPOSE AND JUSTIFICATION

(Please see ISO/IEC Directives, Part 1, Annex C and additional guidance on justification statements in the brochure Guidance on New Work)

Click or tap here to enter text. (Please use this field or attach an annex)

The creation of digital accounts, ownership of digital products, and use of digital services are now common and ordinary, yet they raise significant implications for the constitution of our personal property, its archiving, and its inheritance. With the use of all sorts of social media sites, cloud-based accounts, personal blogs and websites, email and messaging services, as well as the accumulation of online collections of photos, videos and music, unavoidable questions arise as to what happens to them when a person dies.

The death of a person who owns digital accounts and products raises questions about their digital legacy and how it should be managed. This digital legacy and/or digital assets could include **social media profiles** on platforms like Facebook, Twitter, LinkedIn or Sina Weibo; **email** on Outlook or Gmail; **digital financial assets** such as cryptocurrencies; **payment services** such as PayPal, Afterpay and WeChat Pay; **gaming accounts and in-game valuables** on distribution services such as Steam, development platforms like Unity, online games such as World of Warcraft; **images** on Flickr or Google Photos; **videos** on YouTube or TikTok; **music** on Spotify or iTunes; **websites** on a personal domain; **blogs** on WordPress, Tumblr, or Medium; **documents** on Google Drive or DropBox; and **eBooks** on Kindle or Kobo; and **messages** on Telegram or WeChat. They may also include digital vaults, which are secure online platforms for storing digital assets. These range from password managers (Lastpass, 1password) to legacy-oriented vaults (Everplans, GoodTrust, My Life & Wishes) which are generally designed to be shared with family members.

Digital technologies record and archive most people's lives and these materials are valued by family and friends who wish to remember them once they are deceased. Digital legacies have both emotional and material value, with sentimental and financial worth.

It is unclear who has the rights to access, own and bequeath digital legacies with questions of their management involving the people who own them prior to their death; the bereaved and executors of an estate who seek access after a death; the platforms and service providers who store this content in their databases and the governments and regulatory bodies who create and enforce legislation about consumer rights to digital legacies.

In a context where public awareness of managing the digital archives of deceased persons is lacking, so too are recognised standards. Platforms and service providers offer widely varying and often unclear policies on who the data belongs to, and although digital legacies are increasingly recognised as important to death, grieving, and remembering, legal and practical complexities around accessing these legacies abound. There are an increasing number of services designed to be impossible to access without the right key, regardless of any legal order: cryptocurrency wallets, end-to-end encrypted messaging services such as Signal.

An international standard will be useful in addressing digital legacies to help address the consequences of the lack of consumer knowledge about what happens to personal digital "footprints" – accounts, data and content after death. The existing information on digital legacies that consumers can access is typically located in unclear terms and conditions often located on their social media platform's website. Consumers may also learn about digital legacies when contacting their social media platform directly. Even if consumers do gain access to policies related to digital legacy, these policies often vary across different platforms. There needs to be clarity as to what consumers' rights in relation to their digital media after death are.

An international standard is needed to address the issue because:

- **Online platforms and service providers have inadequate procedures for managing digital legacies:**

- o Many online systems and service providers do not have procedures in place to cater for the death of a user.
  - ▪ Google appears to be one of the only innovators in this regard, through its Inactive Account Manager, and Facebook now allows people to appoint a legacy contact to manage a profile after someone dies. Other major services such as Twitter and LinkedIn also have options to deactivate an account or convert it to a memorial account.
  - o The lack of these services creates privacy concerns for the deceased and unnecessary complications for the next of kin.
  - o There are significant internal inconsistencies and recourse to ad-hoc arrangements in how some companies deal with the death of a client, especially relating to personal data.

- **The general public is not sufficiently aware of the need to take responsibility for their digital assets:**
  - o A lack of clear or consistent options from service providers means that individuals need to take responsibility for their digital assets.
    - ▪ This includes creating and maintaining a local archive of important digital assets, making decisions regarding the disbursement of them, and leaving clear and accessible instructions to enable them to be accessed, deleted, or passed on as appropriate.
  - o There are inadequate products and services available to facilitate creating personal digital archives. Digital service providers could offer much more leadership in this respect. Death industry service providers (esp. Funeral Directors, Will makers, Estate Managers, Intellectual Property lawyers) also need to be brought into the management of digital legacies. An international standard could set down a benchmark for professional responsibility.
  - o There are also neither established mechanisms nor customs for re-purposing the digital artefacts of the deceased.
  - o Concepts of digital property and the rights consumers have over digital files are not always clear and consumers need be aware of what can and cannot be bequeathed.
  - o Protocols and practices for bequeathing digital assets alongside material and financial assets in the context of a legal will and 'digital register' needs to be further developed and more widely communicated.

- **The issue relates to property, privacy and rights:**
  - o Ownership of digital media, and the conditions of posthumous access to it, will usually depend upon the particularities of the terms of service agreement that were entered into when the deceased signed up for an online service.
    - ▪ This is made more complicated by contractual rights, intellectual property rights, and various forms of copyright law.
  - o Ambiguities as to where digital media may be held – it could be held locally on a hard drive or remotely on a server, in another country and in another legal jurisdiction.
  - o For digital assets, there needs to be the same well-established procedures for locating, valuing, and transferring ownership of physical property; this means that many years of photos, videos, and documents uploaded to an online service may be lost forever if posthumous access to them is not arranged and local copies are unavailable.
  - o Much online communication is private in nature, and terms of service agreements are designed to protect this privacy, even in death.
    - ▪ Email is a good example of this privacy issue.
    - ▪ Email services such as the US-based Gmail and Hotmail are conscious of this, and have strict rules that forbid access to the email associated with a deceased person's account.

- **The benefits to consumers or the public interest:**
  - o Standardising digital legacies will enable consumers to better understand what will happen to their digital media after death, hence, benefitting consumers by empowering them to be more in control of how their digital legacy is handled.
  - o The uncertainty surrounding digital legacies is why the ISO Council needs new or revised policies or actions within ISO as they relate to consumers' needs in the digital space.
  - o Standardising digital legacies will inform consumers of the rights that they have, particularly in relation to ownership of their data and any rights to privacy.

- o I.e. consumers' data can be stored globally, for example one social media platform may store its users' data in a different country or perhaps across multiple countries, even if the platform is located in another location or if its users' live in different countries (e.g. the United States' Foreign Intelligence Surveillance Act ('FISA') Act).
  - ▪ This is concerning, especially if consumers' data is held in countries with repressive governments.
- o Standardisation of digital legacies will ensure that no consumers are left out and that consumers are safe; just as other consumer safety standards related to goods have been standardised in the past, so too should new and rapidly developing technology be standardised.

Further information, including statistics, to further support the development of a Standard on Digital legacies is included as Annex B.

PROPOSED PROJECT LEADER (name and email address)

John Furbank johnfurbank@internode.on.net

PROPOSER (including contact information of the proposer's representative)

Ben Russell ben.russell@standards.org.au

Standards Australia

☒ **The proposer confirms that this proposal has been drafted in compliance with ISO/IEC Directives, Part 1, Annex C**

PROJECT MANAGEMENT

Preferred document
- ☒ International Standard
- ☐ Technical Specification
- ☐ Publicly Available Specification*

* While a formal NP ballot is not required (no eForm04), the NP form may provide useful information for the committee P-members to consider when deciding to initiate a Publicly Available Specification.

Proposed Standard Development Track (SDT – to be discussed by the proposer with the committee manager or ISO/CS)

☐ 18 months   ☐ 24 months   ☒ 36 months

Proposed date for first meeting: Click here to enter a date.

Proposed TARGET dates for key milestones

- Circulation of 1st Working Draft (if any) to experts: Click here to enter a date.
- Committee Draft consultation (if any): Click here to enter a date.
- DIS submission*: Click here to enter a date.
- Publication*: Click here to enter a date.

* Target Dates for DIS submission and Publication should be set a few weeks ahead of the limit dates automatically determined when selecting the SDT.

It is proposed that this DOCUMENT will be developed by:

☐ An existing Working Group, add title Click or tap here to enter text.

☐ A new Working Group Click or tap here to enter text.
(Note that the establishment of a new Working Group requires approval by the parent committee by a resolution)

☐ The TC/SC directly

☐ To be determined

☒ This proposal relates to a new ISO document

☐ This proposal relates to the adoption, as an active project, of an item currently registered as a Preliminary Work Item

☐ This proposal relates to the re-establishment of a cancelled project as an active project

☐ Other: Click or tap here to enter text.

Additional guidance on project management is available here.

PREPARATORY WORK

☐ A draft is attached

☐ An existing document serving as the initial basis is attached

☒ An outline is attached (see Annex A)
Note: at minimum an outline of the proposed document is required

The proposer is prepared to undertake the preparatory work required:

☒ Yes ☐ No

If a draft is attached to this proposal:

Please select from one of the following options:

☒ The draft document can be registered at Preparatory stage (WD – stage 20.00)

☐ The draft document can be registered at Committee stage (CD – stage 30.00)

☐ The draft document can be registered at enquiry stage (DIS – stage 40.00)

☐ If the attached document is copyrighted or includes copyrighted content, the proposer confirms that copyright permission has been granted for ISO to use this content in compliance with clause 2.13 of ISO/IEC Directives, Part 1 (see also the Declaration on copyright).

RELATION OF THE PROPOSAL TO EXISTING INTERNATIONAL STANDARDS AND ON-GOING STANDARDIZATION WORK

To the best of your knowledge, has this or a similar proposal been submitted to another standards development organization or to another ISO committee?

☐ Yes ☒ No

If Yes, please specify which one(s) Click or tap here to enter text.

☐ The proposer has checked whether the proposed scope of this new project overlaps with the scope of any existing ISO project

☐ If an overlap or the potential for overlap is identified, the proposer and the leaders of the existing project have discussed on:
   i.   modification/restriction of the scope of the proposal to avoid overlapping,
   ii.   potential modification/restriction of the scope of the existing project to avoid overlapping.

☐ If agreement with parties responsible for existing project(s) has not been reached, please explain why the proposal should be approved
Click or tap here to enter text.

☐ Has a proposal on this subject already been submitted within an existing committee and rejected? If so, what were the reasons for rejection?
Click or tap here to enter text.

This project may require possible joint/parallel work with
☐ IEC (please specify the committee) Click or tap here to enter text.
☐ CEN (please specify the committee) Click or tap here to enter text.
☐ Other (please specify) Click or tap here to enter text.

Please select any UN Sustainable Development Goals (SDGs) that this proposed project would support (information about SDGs, is available at www.iso.org/SDGs)

☐ GOAL 1: No Poverty
☐ GOAL 2: Zero Hunger
☒ GOAL 3: Good Health and Well-being
☐ GOAL 4: Quality Education
☐ GOAL 5: Gender Equality
☐ GOAL 6: Clean Water and Sanitation
☐ GOAL 7: Affordable and Clean Energy
☐ GOAL 8: Decent Work and Economic Growth
☒ GOAL 9: Industry, Innovation and Infrastructure
☐ GOAL 10: Reduced Inequality
☐ GOAL 11: Sustainable Cities and Communities
☒ GOAL 12: Responsible Consumption and Production
☐ GOAL 13: Climate Action
☐ GOAL 14: Life Below Water
☐ GOAL 15: Life on Land
☐ GOAL 16: Peace, Justice and strong institutions
N/A   GOAL 17: Partnerships for the goals

Identification and description of relevant affected stakeholder categories
(Please see ISO CONNECT)

Identification and description of relevant affected stakeholder categories (Please see ISO Connect)

	Benefits/Impacts	Examples of organisations/companies to be contacted
Industry and commerce – large industry	- Guidance will be provided on managing digital legacies, archives, and inheritance - Clarity provided on ownership of accounts, data, and content, and thus right of access - Responsibilities clarified in the management of digital legacies - Guidance provided on what should be done in the event of the death of a client in possession of key data, personal or company-owned	- Global companies and platforms such as Google, Apple, Twitter, and Facebook - Cloud storage service providers such as Amazon Web Services and Microsoft Azure - Email and messaging services such as Microsoft Outlook and Gmail
Industry and commerce – SMEs	- As with large industry above - Any company that has a digital space where users leave a digital footprint will be impacted - Death technology companies and start-ups	- Global SMEs e.g. Valve (Steam), Wordpress, Spotify, and World of Warcraft - Death tech industry e.g. GoodTrust, Cake, Settld, and Requiem Code
Government	- Raise awareness on issues regarding personal data, accounts, and content after death - Recognised international standard to guide policies on digital legacies, data & content ownership, and data governance - Guidance provided on digital assets that are held in other countries - Guidance provided on digital assets that cannot be accessed without the right key regardless of any legal order	- National government representatives
Consumers	- Consumers will become aware of the need to take responsibility for their digital assets - Consumers will be empowered with greater control on how their digital legacy is handled after death - Consumer rights on privacy and ownership of data and digital content in the event of their death will be clarified - Consumer safety and privacy in the digital space will be increased	- Consumers - International consumer organisations - National consumer organisations

Labour	- Professional qualifications may be required - Change in the responsibilities and remit of those affected	- Death industry service workers - Cloud storage service workers;
Academic and research bodies	- Research and content are increasingly stored in digital formats in cloud servers - Guidance on digital legacies will provide guidance on the management of digital legacies and rights of access and ownership to the deceased's accounts, data, and content	- National universities - National research institutions
Standards application businesses	- Internationally-accepted standard to provide guidance on the development of certifications in this field	- International Accreditation Forum (IAF) - Other standards and conformity bodies
Non-governmental organisations	- An internationally-recognised standard in this area will impact the work of NGOs that work in the field of digital rights and privacy - Guidance will be provided on data governance policy	- Digital Rights Foundation - Privacy International - International Systems Audit and Control Association (ISACA) - Data Governance Institute
Others (please specify)	-	

Listing of countries where the subject of the proposal is important for their national commercial interests (Please see ISO/IEC Directives, Part 1, Annex C, Clause C.4.8)

There is not one country that is not impacted by this proposal – this proposal is relevant in all countries.

Listing of external international organizations or internal parties (other ISO and/or IEC committees) to be engaged in this work (Please see ISO/IEC Directives, part 1, Annex C, Clause C.4.9)

See table above. In addition:
European Commission;
ECMA International;
International Telecommunications Union (ITU)

Listing of relevant documents (such as standards and regulations) at international, regional and national level (Please see ISO/IEC Directives, Part 1, Annex C, Clause C.4.6)
N/A

ADDITIONAL INFORMATION

Maintenance Agencies (MAs) and Registration Authorities (RAs)

☐   This proposal requires the designation of a maintenance agency.
       If so, please identify the potential candidate:
       Click or tap here to enter text.

☐   This proposal requires the designation of a registration authority.
       If so, please identify the potential candidate
       Click or tap here to enter text.

NOTE: Selection and appointment of the MA or RA are subject to the procedure outlined in ISO/IEC Directives, Part 1, Annex G and Annex H.

Known patented Items (Please see ISO/IEC Directives, Part 1, Clause 2.14)

☐ Yes   ☒ No

If Yes, provide full information as an annex

Is this proposal for an ISO management System Standard (MSS)?

☐ Yes   ☒ No

Note: If yes, this proposal must have an accompanying justification study. Please see the Consolidated Supplement to the ISO/IEC Directives, Part 1, Annex SL or Annex JG

Annex A

Proposed content for digital legacies standard

Contents

Annex B

Statistics to support the creation of a Digital Legacies Standard

In this increasingly online world, the number of people with no digital presence has continued to trend downwards in an exponential fashion. Research by Global WebIndex through the DataReportal January 2023 global overview[1] shows that 68% of the world's population now have a mobile phone, 64.4% use the internet, and 59.4% are active social media users. Trends in the digital sector trend upwards despite an over economic downtown in the tech industry and a general plateauing of total internet user growth in comparison to the exponential increase from the early 2000s to about 2019. Reasons for this vary but the deceleration is expected now that approximately 6 in 10 people are now online.

As with any aspect of our lives, our actions on these platforms create data and content, particularly when use involves account creation. Despite this, conversations around data ownership, responsibility, and access continue unresolved. One aspect of this conversation that is rarely brought up is in the context of the user's passing. Social media accounts are incredibly personalised and used to connect users with their friends and families, and the content and data associated have become increasingly relevant in the contexts of loss and mourning. Facebook users now make up over a third of the world's population (~37%), and the fast-growing TikTok and Douyin, considered a legacy and competitor of the now discontinued Vine video-hosting service, usage centres on content creation in the form of short videos. Your tweets on Twitter, your messages in Whatsapp, your photos and reels on Instagram – what happens when users die? Where does that data go?

To be transparent, the statistics from the DataReportal focus on those between the ages of 16-64. Focusing on those aged 65 and older[2], they are actually the group with the highest in social media usage when measured by percentage of population in recent years. Potentially as a product of covid isolations, seniors have created accounts, particularly on Facebook (34%, 2022) and Youtube (56%, 2022)[3], and reports indicate they primarily use it as a tool for reducing social isolation, loneliness, and staying in touch with family. The ongoing growth in cloud storage, particularly for photos, also raises questions[4]. There is significant sentiment associated with these increasingly vast online records of content and interactivity map out the lives of those that made them[5]. At the same time, there are already approximately 10-30 million accounts owned by deceased on Facebook (2020) and the percentage of the userbase will inevitably increase over time[6].

In countries that have increasingly converted to digital wallets – with adoption expected to reach 4.8 billion by 2025[7] – and the increasingly widespread ownership of cryptocurrencies also creates an issue of how to disburse assets. Concerns regarding cybersecurity has also led to companies to adopt multi-factor authentication (MFA) in various forms with a growth of 178% between 2017-2021 (28-78% of all accounts). SMS (texting) is the most common form of 2FA at 77% however other forms include biometrics, one-time passwords (OTP), and built-in authenticators[8]. While these security measures prevent modern cyberattacks and hacking-related breaches, it also creates access barriers

[1] Digital 2023: Global Overview Report — DataReportal – Global Digital Insights
[2] Share of tech users among Americans 65 and older grew in past decade | Pew Research Center
[3] The 2022 Social Media Users Demographics Guide | Khoros
[4] Cloud Computing - CSO - Central Statistics Office
[5] Digital legacy: The fate of your online soul | New Scientist
[6] How Many Dead People Are on Facebook? | by Sam Westreich, PhD | The Startup | Medium
[7] Mobile Payments App Revenue and Usage Statistics (2023) (businessofapps.com)
[8] 17 Essential Multi-factor Authentication (MFA) Statistics [2023] – Zippia

once the account owners have passed. There is no existing framework for the management of these encrypted assets.

Further statistics of interest include the online gaming industry (3.2+billion users in 2023; market value of $198.4 billion in 2021) where massively multiplayer online (MMO) games make a 48% performing market contribution[9]. Deep friendships have grown from these shared experiences however it is not uncommon for friends to disappear without any notice. It is difficult to determine what has happened to them unless you have contact-methods outside of the game itself which often forbids the sharing of personal information. What then, should be done with inactive accounts? For example, World of Warcraft subscriptions peaked at 5.5 million in 2015 and has since decreased to an estimated 4.46 million[10]. Even disregarding the interchange of accounts unsubscribing and subscribing again, that decrease of 1.04 million users accounts equates to 1.04 million consumers whose data and gaming assets remain on the servers.

Preservation of digital media is also of concern by conservationists and increasingly by the public as they become aware that their data and content are hosted on servers that are subject to market forces. As mentioned earlier, the video-hosting site, Vine, was discontinued in January 2017, however Twitter maintained an online archive of the videos until April 2019[11]. Those videos have now been removed except for those that were individually preserved. While users could individually download their data at the time, much of social media's benefit is the ability to share and interact with other viewers. While the Internet Archive maintains a significant database, it has been subject to significant controversy particularly around questions of copyright and ownership[12].

There is a universal application for a standard in this area. Even those who do not directly own digital assets or have online content and data will have a connection to those that do. In the event of their eventual passing, there is a need to address how to manage their accumulated digital legacy.

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[9] [What is the most popular MMO game? — 2023 statistics | LEVVVEL](#)
[10] [WoW player count 2015-2023 | Statista](#)
[11] [Vine FAQs (twitter.com)](#)
[12] [Internet Archive: About the Archive](#)