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Dear Reader,

Apparently we agree that certain infrastructure components and jointly formulated rules of the game are needed in order to realize the potential of trusted data sharing ecosystems – or as we call it – “data spaces” – in order to finally turn the numerous business scenarios of the data economy into reality. Together we are working on it. Nevertheless, we must also agree that further efforts from business, politics and research are needed at international and economic policy level in order to establish the concepts of IDS as a standard for powerful trusted data sharing ecosystems. We currently have outstanding opportunities at national, European and international level, positioning IDS as the fundamental solution to truly great challenges. The window of opportunity is now. Furthermore, we must continue to create awareness for our common theme – IDS. And then, digital responsibility and sovereignty will not just remain buzzwords but enforceable and reliable pillars of a data-driven economy.

An important factor in this regard is that the architecture of the International Data Spaces has reached the next stage of market readiness. With the new reference architecture model 3.0 and the IDS_ready, the seal for a secure data exchange, the International Data Spaces concept is ready for commercial use. For the first time, the IDS architecture developed by us can also be used by companies outside of the association. This is a historic moment. A big step on the way towards a secure and trustworthy data sharing in industry and economy, of which we are not only happy but also proud.

This development naturally creates new challenges. What does it mean to work with the IDS architecture? How can and should market-ready, recognized and vital data ecosystems according to the IDS standard look like? And how are they built? Defining these aspects is essential for the success of such ecosystems. A task that the ‘Taskforce Business Relevance’ has taken on. Together with the IDSA Hubs and strategic partners, the next steps were determined in the first meeting at the Hannover Fair. The results and developments of which will of course be shared with you.

About IDSA Hubs: We are pleased to have successfully founded our first hubs. They drive the “Internationality” of the IDSA forward and create the basis for a “borderless” sovereign data sharing.

In our current issue of the IDSA magazine – ‘Data Spaces_Now!’, you will not only learn more about the IDSA Hubs and their work, but you will also get an overview on the innovations and developments in our association, more about International Data Spaces, our members and our cooperation partners. We will provide you with technical insights and interesting outlooks, introduce you to our new board members and association members, and report you on our successful fair presentations in Hannover, where we not only presented IDS_ready but also the current version of the Reference Architecture Model 3.0.

As you see, a lot is moving in the right direction. I wish you an exciting and entertaining read.

Sincerely,

Lars Nagel
NEW EMPLOYEES

ANDREAS KEMBUEGLER
HEAD OF MARKETING AND COMMUNICATIONS, IDS A
© IDSA / Michael Neuhaus

Andreas Kembuegler joined IDSA in January 2019. He is responsible for the Association’s marketing and communications activities, image campaigns, and promotion of IDSA’s activities and projects. In addition, he coordinates the Association’s online communications activities, media development (both online and offline), the organization of IDSA events, and IDSA’s participation in trade fairs, conferences, and congresses.

Andreas Kembuegler studied economic geography at Westfälische Wilhelms-Universität Münster. In his diploma thesis, he conducted an image analysis including a SWOT analysis of an Austrian winter sports resort, and gave recommendations for its market positioning. Later, he studied business administration at Verwaltungs- und Wirtschaftsakademie Arnberg. In his thesis there, Mr. Kembuegler conducted a competition analysis for a university educational program.

From his professional activities in the IT sector (mainly in the web services, ERP, and business intelligence environment) and his work for a non-profit organization in the education and research sector, Mr. Kembuegler has more than fifteen years of experience in professional marketing.

FROM LEFT TO RIGHT: SEBASTIAN EMONS, PETRA SCHULZ, MERT GÜLEC, CHRISTOPH MERTENS, SILAS FISCHER, SUSANNE IMMEL, SEBASTIAN STEINBUSS, ESTHER WILK, THORSTEN HUELSMANN, ANDREAS KEMBUEGLER, ANTOINE GARNIER, AND LARS NAGEL.
NOT IN THE PICTURE: HARSIMRIT BHATIA, KARINA KAMPERT, LAURA KASTERKE, NATALIA SIMON, DR. RALF-PETER SIMON.
© IDSA / Michael Neuhaus

ANTOINE GARNIER
SENIOR CONSULTANT AND INNOVATIONS MANAGER EU PROJECTS, IDS A
© IDSA / Michael Neuhaus

Antoine Garnier started working for IDSA in January 2019. He is responsible for IDSA’s contribution to several European research projects. One of these projects is DIH² (www.dih-squared.eu), which is a network of twenty-six Digital Innovation Hubs that aim at fostering the digitization of small and medium-sized enterprises across Europe. The project has a special focus on agile manufacturing. Major activities of the project refer to the development of tools allowing companies to leverage the benefits of digital transformation.

Before Antoine joined IDSA, he worked at Institut Mines-Télécom (IMT) in France (from 2013 to 2018), where he was Consultant and Innovation Manager for national and EU projects focusing on artificial intelligence, big data, and new media. Prior to that, he ran his own company for two years, dealing with the development of an online recommendation engine for books.

Antoine holds a degree in law from the University of Oslo (Norway). He also followed the Entrepreneurship Program at ESCP Paris, before becoming a mentor himself at Paris&Co and Techstars (Paris).
T-Systems heavily promotes the IDS_ready seal. However, many companies still don’t know what that is. The makers of IDS promise to offer a data space that comes as a trusted entity advocating data security and data sovereignty.

Seven years ago, huge banners could be seen across the halls of Hannover Messe, promoting new, intelligent ‘4.0 components’ making enterprises ‘Industry 4.0 ready’. This year, visitors did not come across such bold value propositions very often, for most people in business have recognized that simply installing a ‘4.0 component’ may not be sufficient to build the factory of the future or digitally transform existing facilities. It has become common sense that – alongside with relevant technical components – efficient business processes, appropriate business models, secure data spaces, and reliable security mechanisms need to be established.

While IDS_ready from its wording obviously resembles the marketing slogans of the past, industry has learned that there is one major difference: The initiators of IDS do not offer any ‘4.0 components’, but instead provide a data space for secure and trusted data exchange. This is a major step towards creating and establishing new, data-driven business models – not only in industrial manufacturing, but practically across all industries. “IDS_ready is a reliable value proposition to our customers. It helps create competitive edge, as it allows us to implement real data sovereignty in the digital world for the first time ever in Germany. Data sovereignty has become a major topic in industry, both in the B2B and the B2C segment”, Sven Löffler of T-Systems explains. The telecommunications company headquartered in Bonn considers itself an enabler mainly for small and medium-sized enterprises. “Today, many SMEs look for some kind of a central trusted entity. They do not want to deal with the latest encryption technology on a daily basis. So, our job is to provide this trust and security, alongside with a plausible business model.”

Facilitating data traceability and lineage
Sven Löffler and his colleagues are part of the International Data Spaces Association (IDSA). Collaborators in this initiative are Fraunhofer (Europe’s largest application oriented research organization), a number of large industrial corporations (e.g. Thyssenkrupp, Sick, Bayer, Schaeffler, Volkswagen, or Rittal), and multiple SMEs. The goal of IDSA is one that makes even direct competitors want to join forces: creating
secure data spaces, in which companies can establish new, data-driven business models allowing them to exchange data among each other, while data sovereignty is maintained for each data provider across the entire data value chain.

An important area of application of such data spaces is machine learning. The idea is to establish a data marketplace where companies can acquire neutralized machine data in order to create and offer platform independent micro-services in turn. In such a scenario, a machine manufacturer may not have to make its data available if it does not want to; instead, it may simply request and use the data from other companies – provided it fully complies with the data usage policies specified by the respective data provider. What IDS developers conceive of is a secure, trustworthy data marketplace where companies can collaborate without needing to set up complicated contracts.

This sounds interesting to machine builders and providers of 3D printing products and services too, of course. Consequently, Thyssenkrupp and IBM are jointly developing a platform based on the IDS architecture extended by IBM blockchain technology. Combining their approaches, the two companies aim at facilitating data security and data sovereignty in connection with a higher degree of automation in order processing in additive manufacturing (AM) settings. The benefits of the platform are twofold: 1) quicker and easier access to additive manufacturing, especially for SMEs having no experience in this field so far, and 2) improved planning and a verifiable quality level across the entire process chain. And this is how it works: At the beginning of the AM process, a client submits construction drawings (i.e. CAD files) to Thyssenkrupp specifying the components to be manufactured. This data is valuable intellectual property of the respective client. Thanks to the IDS and IBM blockchain technology, data security and data sovereignty is always guaranteed to the client. This way, the platform economy will be raised to a new level in terms of higher security and efficiency.

At the same time, researchers are working on similar solutions. “AMable” is a research and development project aiming at creating an ecosystem for 3D printing. The goal of the project is to develop and establish a digital marketplace offering services for facilitating additive manufacturing of products from construction to 3D printing to final processing. Members of the AMable ecosystem are AM service providers, user companies (primarily SMEs), and infrastructure providers. The digital marketplace provides a secure infrastructure for AM service providers and AM service requesters to exchange information and, for the latter, to eventually book the services offered. Information exchange takes place on the basis of the IDS...
architecture, which is supported by blockchain technology. To ensure that no secret construction data ends up in the hands of a competitor, each company making available such data can specify a data usage policy, adherence to which is ensured by the secure and trustworthy data space. In addition, data traceability and lineage features are offered.

**Building upon ISO 27001**

Many companies still shy away from sharing data. “Participants of the IDS can decide for themselves who sees their data, who is allowed to use it, how it is used or what it costs”, summarizes Gerd Brost of Fraunhofer AISEC. Certification for companies and the component, for example the IDS connectors, gives security to the users in the IDS ecosystem. “We are on the eve of a large-scale rollout of the ‘IDS_ready’ certifications. The IDS_ready label invites companies to gain their first experience with IDS and prepares for the actual certification. There is a hidden uncertainty in industry about data and data sovereignty, and we counter both these fears with IDS”, says Gerd Brost.

IDS_ready certificates will be issued by TÜV Süd (a leading certification body in Germany) and professional services provider PricewaterhouseCoopers for a duration of one year.

While these two certification authorities will be evaluating IDS conformity of the organization seeking certification, experts from Fraunhofer will be checking whether the respective organization is entitled to participate from the point of view of the technical components it uses. Companies already certified against ISO 27001 or a comparable standard can build upon this certification when applying for IDS_ready, which will accelerate the process. “Regarding certification of the organization itself, we look at the company’s documentation, its processes, and its basic IT security mechanisms in place. As for the technical components, one of three security levels may apply: ‘Basis’ with standard internet security, ‘Trust’ with non-cloneable identities and remote attestation, or ‘Trust+’ for connectors that are protected from manipulation by malicious admins”, as Gerd Brost explains. Apart from the manufacturing industry, other industries will benefit from IDS_ready as well. In the medical industry, for example, exchanging highly sensitive patient data, also across national borders, will be facilitated by the high security level of the IDS.

B2C markets are becoming increasingly aware of the solution as well, as it will allow consumers to regain sovereignty over their personal data. For example, it often happens that when people are traveling, several apps have access to their data without them knowing. At the same time, some kind of integrated mobility platform (on which local public transport services, airlines and car sharing service providers collaborate to bill the traveler according to their respective share of services provided) is missing. “Such a platform will be accepted by consumers only if data privacy, data security, and data sovereignty are guaranteed. Therefore, IDS is so important to us”, as Sven Löffler of T-Systems emphasizes.

For more information on how to apply for IDS_ready: [https://www.internationaldataspaces.org/the-principles/#_certification](https://www.internationaldataspaces.org/the-principles/#_certification)
The publishing of DIN SPEC 27070, adding to the IDS reference architecture, represents another milestone on the way to secure cross-company exchange of industrial manufacturing data. The new standard was developed in the course of a workshop led by Andreas Teuscher (SICK AG) and Gerd Brost (Fraunhofer AISEC), who were supported by Martin Uhlherr from DIN (German Institute for Standardization).

DIN SPEC 27070 specifies the requirements to be met by a security gateway used for exchanging industrial manufacturing data and services, including the environment such a gateway can be used within. The gateway, which can be embedded in the IDS ecosystem and which has been specified in line with IDS certification rules, allows three different levels of security (Base, Trust, Trust+). These security levels comply with ISO/IEC 62443 (particularly ISO/IEC 62443-4-2), but have been extended by including additional requirements deemed necessary for the IDS ecosystem.

DIN SPEC 27070 is the first initiative specifying requirements regarding a secure gateway for cross-company data exchange in the manufacturing industry. Gateways for other industries are envisaged for the future. “Our goal is to make DIN SPEC 27070 an international standard. And we see possibilities of broadening its scope and cover other areas of application as well, so that it can evolve into a multipart standard in the medium run”, say Andreas Teuscher und Gerd Brost, who also express their gratitude to all partners from industry and research involved in the process: “Creating this new standard would not have been possible without the great commitment from each single partner.”

As soon as DIN SPEC 27070 has been published by the German Institute for Standardization, it will also be available on:
www.internationaldataspaces.org
Open data is widely seen as a driver of innovation and an anchor for trust and transparency. An important aspect of the International Data Spaces ecosystem is the provision and consumption of open data to foster and enhance data-driven business models.

The new position paper gives an overview of the principles and technologies related to open data, describes intersections regarding these principles and technologies with those related to IDS, identifies potentials resulting from bringing both together, and proposes a concrete application architecture to facilitate rapid adoption.

Furthermore, the position paper delivers practical guidelines and solutions to harness the full potential from combining open data and IDS. Practical artifacts will be made available for application, reuse, and further development.

You can download the position paper from: https://www.internationaldataspaces.org/ressource-hub/publications-ids/
IDS-RAM 3.0
New IDS Reference Architecture Model Published

The IDS Reference Architecture Model (IDS-RAM) constitutes the conceptual basis of IDS-compliant data exchange between organizations. In addition to specifying rules and mechanisms ensuring data sovereignty within data ecosystems, version 3.0 of the IDS-RAM, which was presented for the first time at this year’s Hannover Fair, focuses on concepts such as big data, artificial intelligence, the industrial internet of things, and blockchain technology to be leveraged for IDS. “The new version of the IDS-RAM defines safety standards, control and enforcement rules for data usage, and mechanisms for data traceability and data provenance checks”, says Sebastian Steinbuss, Director Architecture at IDSA.

The IDS-RAM 3.0
• focuses on certification, security, and governance,
• defines security standards plus roles and responsibilities for the data economy,
• stipulates control and enforcement rules for data usage, and
• specifies rules and mechanisms for data traceability and identification of data sources.

For the IDS-RAM 3.0:
https://www.internationaldataspaces.org/resource-hub/publications-ids/
In recent years, there has been a significant growth of interest and investment in blockchain technology. Many companies and governmental organizations, both large and small, have proposed applications of this technology across different sectors (social, financial, industrial, and governmental). Blockchain technology is widely seen as providing entirely new opportunities to disrupt traditional product and service offerings. This is mainly due to the absence of a central trusted third party, the immutability of the blockchain record, the distributed, decentralized nature of blockchains, and the ability to set up smart contracts.

The IDS Reference Architecture Model (IDS-RAM) focuses on data sovereignty and data-driven business ecosystems, allowing organizations to exchange and share datasets in a secure and controlled way using the IDS Connector concept. Some of the features of blockchain technology are consistent with the features of the IDS-RAM, such as the absence of a central trusted third party providing central data storage, or the distributed, decentralized nature of the concept. Other features, such as immutability (of the blockchain record), would add to the goals of IDS. This makes it highly interesting to explore how blockchain technology could be adopted to play an integral part in future versions of the IDS-RAM.

“Blockchain Technology in IDS” discusses possible usage scenarios of blockchain technology within the IDS concept. This is illustrated by several use cases from the IDS ecosystem combining the power of IDS and blockchain technology features.

In a nutshell, the position paper highlights
• the core concepts of blockchain technology,
• potential usage scenarios for blockchain technology within the IDS context,
• possibilities for implementing IDS architectural concepts using blockchain technology, and
• how several projects already use IDS in combination with blockchain technology.
ABOUT THE ASSOCIATION

Questions for...
Henk Jan Vink

Why are you taking an active part in the International Data Spaces Association? TNO has been very active in many different data-sharing initiatives, both on a national and a European level. From this experience, we believe that IDS has the potential to become the best data-sharing initiative globally. As we have shown over the last couple of years by contributing to the IDS Reference Architecture, we are fully committed to the success of IDS and want to continue to contribute to its expansion.

What is so special about IDSA in your opinion? The IDSA has a firm backing in research, but with a strong commitment also from business key players. IDS can be very relevant for society and economy. The idea behind IDSA – what we all contribute to and where we profit from the advancement of IDS as a whole – is how we want to innovate. For us, this is a good model to leverage the intelligence of the community, where each member can play its role.

Imagine the International Data Spaces Association ten years from now – what should be the achievements accomplished by then? Setting up an IDS Connector with anyone in the world that is trusted by IDS should be as easy as online shopping. The system gives IDSA all relevant information – who is out there, what data is available, under what conditions, and how to connect. For organizations, we will make data-sharing a safe, cost-efficient and rewarding experience that allows their business to grow and connect with others.
ABOUT THE ASSOCIATION

New Members Play an Active Role in Designing and Establishing IDS

The International Data Spaces Association keeps growing, which shows the broad international, cross-industry interest in the International Data Spaces initiative. It’s the member organizations that make IDSA such a vital and creative endeavor. They constitute an international network of partners that bring in their expertise and commitment to design and sustainably establish International Data Spaces.

In recent months, IDSA has been welcoming seven new members:

Lobster GmbH from Bielefeld (Germany) develops future-proof software solutions for electronic data exchange (EDI/EAI), supply chain management (SCM), and product information management (PIM).

ITI (Instituto Tecnológico Informática) develops customized ICT solutions that help enterprises improve their competitiveness. Headquartered in Valencia (Spain), the technology center collaborates in research, development, and innovation projects and offers enterprises training and consulting.

ILVO (Instituut voor Landbouw, Visserij en Voedingsonderzoek) is an internationally recognized research institute in the fields of agriculture, fishery, and food. Headquartered in Merelbeke (Belgium), it is part of the Government of Flanders. ILVO stands for multidisciplinary, independent research and provision of specialized services.

Deutsche Gesellschaft für Zerstörungsfreie Prüfung e.V. (DGZfP) located in Berlin is Germany’s leading organization in the field of non-destructive testing (NDT). DGZfP explores, develops, tests and disseminates NDT methods, which are becoming increasingly relevant for digital products and services as well.
Brainport Industries is a network comprising over one-hundred suppliers across the high-tech supply chain in the Netherlands. The goal of Brainport Industries, which can be considered a prime example of an innovation lab, is to significantly reduce time-to-market by offering customers (mainly OEMs) an efficient, well-organized supply chain from development to production to distribution.

Canada’s Digital Technology Supercluster is the first IDSA member organization from Canada. The initiative supports enterprises in facilitating and funding ambitious, collaborative technology leadership projects through a shared investment model. This allows enterprises to innovate faster, as they benefit from more robust business ecosystems, more efficient supply chains, and better opportunities to develop talent, diversity, and capacity.

The Bundesdruckerei with headquarters in Berlin is a guarantor for secure identities and reliable identity management. With technologies and services made in Germany, the company is dedicated to protecting sensitive data, communications, and infrastructures. The company’s solutions are rooted in the secure identification of citizens, customers, employees, systems etc. both in the analog and digital world.
ABOUT THE ASSOCIATION

New Board Member
Dario Avallone

Dario Avallone, born in 1962, received his university degree in computer science in April 1987. Since July 1987, he has been working in the R&D laboratory of Engineering Ingegneria Informatica S.p.A. in various positions. Since 1995, he has been responsible for the European research unit, and since 1998, he has also been in charge of identifying new business opportunities at a European level. In 2000, Mr. Avallone became Director of the R&I division, pursuing the mission to push innovation into business.

Why are you taking an active part in IDSA?
IDSA represents a great opportunity for Engineering S.p.A. as a multinational player focusing on innovation initiatives at a European and global level, and playing a leading role in several of them (such as FIWARE, BDVA, or ECSO). Being part of the most active community working on data sovereignty to enable the data-driven economy perfectly fits our overall strategy.

The manufacturing industry is one of the top market segments of Engineering S.p.A.. This is why we are keen on working as part of an innovative community increasing awareness and improving technologies to support the digital transformation both in the manufacturing industry and in other industries.

Engineering S.p.A. therefore is highly pleased to be a member of IDSA now, and to provide both use cases and software components. In particular, we aim at addressing data confidentiality and heterogeneity through dedicated software components and services allowing analysis and harmonization of datasets and data streams, for the sake of enabling new, data-driven business models.

What is so special about IDSA in your opinion?
The focus on data sovereignty is probably the most valuable “unique selling proposition” of IDSA. Another strong point of IDSA is that it is based on both large and small industrial players, as well as on distinguished research centers and very innovative ICT providers. Furthermore, IDSA relies on collaboration and evolution by clustering its activities with those of other relevant organizations worldwide. This endeavor is substantiated through a well-structured and credible business and technical vision endorsed by IDSA and its members. The most recent campaign to spread IDSA values with the help of national IDSA Hubs is certainly a very effective way to enlarge the community.
ABOUT THE ASSOCIATION

New Board Member
Ursula Morgenstern

Ursula Morgenstern became CEO of Atos Germany in February 2018. She is now responsible for the entire business of Atos in Germany, comprising a workforce of more than 12,000 people.

With over 100,000 employees worldwide, Atos is one of the world’s leading companies in the field of digital transformation. Ursula Morgenstern is a member of the Group’s Executive Committee reporting to Atos’ General Management Committee. Moreover, Mrs. Morgenstern is a Global Board Sponsor for Atos’ partner SAP SE and for Atos Business Accelerators, a strategic initiative promoting digital transformation.

Ursula Morgenstern joined Atos in 2002, when the Group took over KPMG Consulting. She has more than twenty years of experience in IT. Before she was appointed CEO of Atos Germany, Mrs. Morgenstern had been head of Atos’ Business & Platform Solutions business unit (as of July 2015). Prior to that, she had been CEO of Atos UK/Ireland.

Why are you taking an active part in IDSA?
Industry 4.0 not just refers to the optimization of production processes, but includes also the transformation of business models. In this regard, the exchange of data between business partners across the entire value chain plays an important role. IDSA defines technologies and rules that ensure the members of business ecosystems can exchange data in a controlled and trusted fashion. With my contribution to IDSA, I would like to help promote the development of new business models for Industry 4.0.

What is so special about IDSA in your opinion?
Many enterprises are trying to establish new business models over digital platforms run by dominant platform operators. IDSA is different. IDSA pursues an open approach, which gives enterprises much more freedom with regard to developing new business models, and much more control over their data and how they can monetize it.
Antje Williams was appointed Senior Vice President 5G Campus Networks in October 2018. 5G Campus will develop solutions based on mobile technology (4G/5G) for industry parks, warehouses, logistics terminals etc. The solutions will start on 4G frequencies to develop 5G solutions for the industry by the time 5G is available. Before her appointment, Antje was leading the 5G program within Deutsche Telekom for three years, including Architecture, Business, Standardization, Industry fora like NGMN, GSMA, European initiatives as 5GPPP, Finance, Communication and the 5G:haus (Telekom's test bed for 5G).

Prior to her new role, Antje became Head of Inflight Connectivity and Managing Director of T-Mobile HotSpot GmbH (a subsidiary of Deutsche Telekom). She was responsible for offering Wifi access on board of fifteen airlines (in 2014). Before joining Inflight, Antje was Head of Sales for the national Wholesale Department in Southern Germany for five years, where she was responsible for the fixed-line business with customers such as Telefónica Germany, Kabeldeutschland, or BT Germany. Antje started in 2001 in the Legal Department of Deutsche Telekom.

Why are you taking an active part in IDSA?
For Deutsche Telekom, and for the telecommunications industry as a whole, data sovereignty is of critical importance. It's about time we find a solution that allows enterprises to exchange data between each other, and to do so for their mutual benefit, without fearing this data is misused for purposes other than agreed upon by the parties involved.

What is so special about IDSA in your opinion?
IDSA is an initiative that is both recognized in the scientific community and promoted through public funding. The IDS reference architecture is supported by one-hundred high-profile organizations worldwide already. These are facts that indicate IDSA has reached a high level of awareness in business, which is critical for large-scale adoption.
ABOUT THE ASSOCIATION

IDSA Industrial Community (IDS-I)
New community connects Industry 4.0 and Data Economy

Plattform Industrie 4.0 (PI4.0) and IDSA are bringing together their competencies: PI4.0’s know-how regarding Industry 4.0 and IDSA’s expertise regarding data sovereignty and data ecosystems now complement each other in the IDS-I Community.

Objectives of IDS-I:
- establish a virtual data space that supports secure exchange and easy linking of data in industrial business ecosystems on the basis of technology standards and common governance models;
- ensure data sovereignty by enabling data usage monitoring;
- provide linkage to PI4.0 and the Industrial Internet Consortium with respect to production and manufacturing;
- specify what interoperability may look like and how IDS value propositions can be implemented in Industry 4.0 settings.

Basically, IDS-I aims at combining and leveraging the following concepts:
- security gateways,
- secure identities,
- cross-company communication by means of OPC UA,
- roles and rights models,
- standardization.

Join our community!

To learn more about IDS-I, please contact: industrial@internationaldataspaces.org
IDSA ON THE ROAD

Hannover Messe 2019
IDSA at the world's leading trade fair for industry

Christoph Mertens (IDSA, left) in a conversation with Dr. Oscar Lázaro, Managing Director of Innovalia Association

Definitely an eye-catcher – IDSA’s booth at Hannover Fair 2019

Ulrich Ahle (right), CEO of Fiware Foundation and Member of the IDSA Board, in a conversation with visitors from Japan

Sarah Wiederkehr (IBM) and Dr. Joachim Stumpfe (Thyssenkrupp) presenting 3D printed products created across a secure data value chain
The "IDS_ready" seal of approval was definitely the star at IDSA's booth.

Networking at IDSA's booth

Sven Löffler (center) of T-Systems explaining to Andreas Kembügler (IDSA, left) and journalist Rober Weber Deutsche Telekom's Data Intelligence Hub, the world premiere of an IDS_ready component.

Photos: IDSA / Lutz Kampert
Federal Minister Anja Karliczek: “IDS is the engine of the European data airbus.”

Fostering a competitive economy
“We intend to create the de-facto market standard for sovereign data exchange worldwide”, as Dr. Reinhold Achatz, CTO of thyssenkrupp and Chairman of the IDSA Board, summarized the vision of the initiative. As a key element of a secure data sharing infrastructure, IDS contribute to the competitiveness of the economy by creating secure and trusted data ecosystems taking common European values into consideration. In times of digital networking and the use of smart services, these values are essential for companies that want to develop new, data-driven business models in order to stay competitive on the market.

IDS: Key element of AI
Federal Minister of Education and Research, Anja Karliczek, emphasized in her speech that International Data Spaces are an important component of a European data infrastructure and are the driving force behind the European “data airbus” as planned by Federal Minister for Economic Affairs and Energy (BMWi), Peter Altmaier. This assessment is shared by Dr. Alexander Tettenborn, head of the Development of Digital Technologies department at BMWi: “Artificial intelligence – that is data at turbo speed: short latency times, growing responsibility for autonomous systems, and many stakeholders. This is crying out for the integration of IDS as a key element.”

Representatives from business and politics at the “IDS High Level Stakeholder Event”
Establishing data security and data sovereignty across international data marketplaces, and developing international standards – the International Data Spaces Association (IDSA) pursues these objectives by promoting IDS as a key architecture for innovative data sharing applications leveraging artificial intelligence. During the “IDS High Level Stakeholder Event” in Berlin in February, this initiative, its latest achievements, and its plans for the future introduced to experts and decision-makers from federal ministries, large corporations, SMEs, associations, and research organizations.
With the “IDS High Level Stakeholder Event”, we have taken the IDS another big step forward. We positioned IDS as part of a secure data infrastructure, and as a key architecture for innovative AI applications. IDS thus contribute to the competitiveness of the European economy. This was acknowledged by over 90 participants joining the event.

“The ethics of the digital world require a paradigm shift giving data sovereignty back to those who are entitled to it. This applies in particular to sensitive, patient-related data. IDS have the potential to implement this claim of data ownership on the technology level.”

Dr. André Nemat, Surgeon and Founder Institute for Digital Transformation in Healthcare, University Witten/Herdecke

For more details, impressions, and statements, please go to: www.internationaldataspaces.org/high-level-stakeholder-event/

“We very much welcome the fact that IDS are not just operating at a national, but also at an international level. In our efforts to standardize data interfaces, we quickly realized that it makes no sense to restrict these activities to Germany. Therefore, it must be the clear purpose to be active also abroad and to set a standard there as well.”

Michael Bültmann, Managing Director HERE Technologies
“In implementing the IDS standard, we must take common European values into consideration. In particular, we must take the competitive situation with China and the Silicon Valley seriously, and we must continue to operate globally.”
Prof. Dr. Peter Bruck, Data Intelligence Offensive Austria

“When data is exchanged between organizations on an international level, different cultures and languages collide. Overcoming these differences and achieving common results requires hard work. With its unique ecosystem, IDS can accomplish this through a common effort and by managing the transformation.”
Gerhard Baum, CDO Schaeffler

“We have a chance, and we need to seize this opportunity, to make today’s German business champions the next digital champions worldwide. We will succeed in this endeavor if we manage to closely coordinate digitization and AI expertise in the pre-competitive area. That includes topics like Industry 4.0 and IoT platform standards, 5G platform standards, data sharing initiatives in the private and public domain, or common AI algorithms in research and development.”
Karl-Heinz Streibich, President acatech
The International Data Spaces Association (IDSA) has established the first “IDSA Hubs” in Europe. Each IDSA Hub will be run by an excellently networked partner in their respective country. The idea behind the Hubs is to promote and disseminate the IDS standard on data sovereignty and data ecosystems across Europe, also by seeking cooperation with international research and development organizations and interested companies. The partners will run initiatives to recruit new members for the IDSA and disseminate IDS-based applications. Moreover, they will initiate and coordinate projects to develop the IDS standard further, also beyond their country’s borders.

The first five Hubs were officially presented on the occasion of the IDSA Winterdays, taking place in Berlin in December 2018. Dr. Reinhold Achatz, Chairman of the Board of the IDSA, welcomed the Hubs’ representatives from Spain, France, Italy, Finland, and the Netherlands, who then received their certificates of incorporation.

Meanwhile a sixth IDSA Hub has been established in the Czech Republic.
TNO is an independent research organization with over 3,200 professionals all over the world. TNO connects people and knowledge to create innovation that boosts the competitive strength of the economy and the well-being of society in a sustainable way.

TNO focuses on nine topics:
- Buildings, Infrastructure, and Maritime (“Robust constructions, sustainable use”)
- Circular Economy and the Environment (“Directing and accelerating sustainability”)
- Defense, Safety, and Security (“We’re putting our knowledge and technology together to work for safety and security”)
- Energy (“Faster towards a sustainable energy supply”)
- Healthy Living (“Focusing on participation, not on the disease”)
- Industry (“Innovating for employment, welfare, and well-being”)
- Information & Communication Technology (“Interpreting and accelerating digital transformation”)
- Strategic Analysis & Policy (“Turning complex issues into concrete innovations”)
- Traffic and Transport (“Helping to create livable, sustainable cities”)

Frans van Ette from TNO The Hague in response to the question “Why IDSA”?
“TNO believes that sharing data is key to economic growth and societal progress. IDSA has a firm basis for a solid data sharing architecture and the right governance to expand globally. TNO has been applying IDS in a number of ecosystems for quite some time, starting in industrial manufacturing, but expanding now to other industries as well, such as agro/food, energy, and logistics. We are seeing adoption now, as well as great interest from key players in the Netherlands, including several government ministries. The time is right to take IDS to a higher level in the Netherlands, which we want to accomplish together with leading organizations and partners which already are members of IDSA.”
French IDSA Hub Officially Established
Institut Mines-Télécom (IMT) signs its entry to IDSA Hubs

The International Data Spaces Association (IDSA) and IMT signed an agreement confirming that IMT will now be operating as the official “IDSA Hub” in France. The idea of European IDSA Hubs is to promote and disseminate the IDS standard on data sovereignty and data ecosystems across Europe. With the establishment of the French IDSA Hub, initiatives in the fields of data sharing and artificial intelligence are expected to boost significantly. The signing of the agreement took place during the Viva Technology Event in Paris, which is dedicated to innovation and promotion of startup companies.

As the French IDSA Hub, IMT will be promoting the IDS concept among public and private organizations in France. The aim is to accelerate activities in the field of data sharing by starting new initiatives and supporting existing ones in France, and by connecting these initiatives with projects on a European level (such as BOOST 4.0, for example).

IMT has been assigned this key role in the field of data sharing on the basis of its extensive knowledge regarding information and communication technology, and its position within initiatives in several sectors, such as industrial manufacturing or healthcare.

Why IDS? For more and more companies, data is turning into a strategic asset. Consequently, companies want to stay in control of the usage of their data. Sharing data thus is getting more and more complex, as artificial intelligence, for example, offers entirely new opportunities that require new and adequate forms of data management. At the same time, the costs of data sharing must be reduced in order to facilitate large-scale implementations of data sharing solutions.

IMT considers standardization in the field of data sharing – as promoted by IDS – as key for addressing these issues. The IDS approach also works well with the broader range of technologies IMT is dealing with. Its research activities in the industrial manufacturing sector, for instance, need to rely on standards for easy and secure exchange of data and training of algorithms, in order to fully exploit the potentials of Industry 4.0 (i.e. Industrie du Futur in France).

IMT is a member of IDSA and is especially taking an active part in the working group dealing with the IDS architecture (“WG Architecture”). Through the French IDSA Hub, this knowledge and experience can now be made available to other industry players in France, allowing them to develop their own applications.

LARS NAGEL, CEO IDSA, AND PHILIPPE JAMET, DIRECTEUR GÉNÉRAL IMT © IMT
EXCUSE ME:
What exactly do we need IDS for?
IDSS Use Cases are Making it Happen
New Brochure “Use Case Overview 2019” Out Now

The IDS provides a basis for smart-service scenarios and innovative cross-company business processes, while at the same time making sure data sovereignty is guaranteed for the participating data owners. In order to identify the requirements from potential application scenarios on the one hand, and to validate the applicability of the IDS concept in real-world business scenarios on the other, the members of the IDSA develop different use cases.

Each member of the IDSA has implemented a specific, business-driven IDS use case. The purpose of each use case is to identify, analyze and evaluate the requirements of the respective user enterprise to be met by the IDS. Each IDS use case demonstrates the innovation brought about on the basis of the IDS. In addition, each such case creates a potential core of an ecosystem through integration of additional (also foreign-domain) partners and the development of value-adding smart services. Last but not least, each IDS use case serves to spread the news about IDS – not just throughout the respective industry and country, but also on a cross-industry and cross-country level.

All recently developed IDS use cases are now presented in the new “Use Case Overview 2019 – Hannover Fair Edition” (as the brochure was presented for the first time at this year’s Hannover Fair). The brochure provides valuable insights and presents selected innovations, business models, and technologies illustrating the potentials and benefits of IDS.

For the download of the Use Case Overview 2019: https://www.internationaldataspaces.org/ressource-hub/publications-ids/
If used in the right way, industrial additive manufacturing (AM) technology offers numerous benefits to companies. However, AM requires in-depth engineering expertise and high investments in knowledge and equipment. Unfortunately, both these requirements are usually not given in small and medium-sized enterprises. The collaboration of thyssenkrupp, IBM, and Fraunhofer ISST therefore aims at establishing a platform that brings together all actors in the industrial additive manufacturing process chain. The platform provides easy access to AM engineering expertise and equipment to any party involved. Utilizing IDS Connectors and blockchain technology, the platform creates a scalable, trustworthy ecosystem to be used by companies from various industries (also beyond AM). It aims at facilitating the exchange of big data among multiple parties, while provenance and immutability of data will ensure product quality and protect intellectual property rights.
Objectives
- Creating a trustworthy ecosystem for transfer of valuable and IP-relevant engineering data
- Processing industrial AM orders in a fast, traceable and reliable manner
- Protecting IP rights and ensuring product quality

Technology / IDS Components
- IDS Base Connector
- Blockchain technology (Hyperledger Fabric)

Partners
- IBM
- thyssenkrupp
- Fraunhofer ISST

Benefits
» Secure platform for exchanging big data and allowing seamless interaction between all parties across the value chain
» Easy access to AM technology and services for small and medium-sized enterprises
» Intellectual property rights protected and product quality ensured through provenance and immutability of data

IDSA and Fraunhofer support the adoption of IDS base components and their integration in other value chains with the help of two EU-funded Innovation Actions: MIDIH (Manufacturing Industry Digital Innovation Hubs) and AMable (AdditiveManufacturABLE). In the MIDIH project, Sebastian Steinbuss, IDSA Director of Architecture, is working on the alignment of the “Industrial Additive Manufacturing Services“ use case with the integration of CPS data for new and innovative, data-centric services for manufacturing in the data economy. Fraunhofer IML is working on the integration of dynamic supply chains of logistics service providers. In the AMable project, methods and technologies are developed that allow SMEs to collaborate across AM process chains based on a trustworthy digital infrastructure. All in all, the activities within the “Industrial Additive Manufacturing Services“ use case show that IDS works as a unique enabler of new business models within AM value chains, and also within supply chains that require interoperability for this dynamic and globally distributed ecosystem, as well as mechanisms for data traceability and data provenance checks.

Seamless and Secure Interoperability in European Manufacturing

IDS-Based Show Case for Creating a Cross-Border Production Data Stream

Solution and problem solved
The Smart Connected Supplier Network (SCSN), the International Data Spaces Association (IDSA), and Smart Factory Kaiserslautern (Smart Factory KL) have joined forces to create a world-class solution for interoperability in European manufacturing – across countries, companies, ERP systems, and production modules. The result is a single, seamless, secure production data stream, which includes

- easy order entry,
- seamless and secure cross-border transfer of orders,
- spatially and temporally flexible order and production processing.

Benefits
Connecting the best of two worlds:

» Seamless and secure interoperability between ERP systems (i.e. across company borders) and

» seamless and secure interoperability between modular production modules

Partners/Ecosystem
- Smart Factory KL
- SCSN
- IDSA
- Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek (TNO; English: Netherlands Organization for Applied Scientific Research)
- Brainport Industries
- ISAH Business Software

Main technology features
- Order entry in ISAH ERP configured according to the SCSN standard
- IDS Connector transferring orders from SCSN-compatible ERPs to Smart Factory ERP
- Semantic technologies to facilitate interoperability across all systems

PHOTO
THE SHOW CASE AT THE HANNOVER FAIR: MONA KEIJZER, THE DUTCH STATE SECRETARY FOR ECONOMIC AFFAIRS AND CLIMATE POLICY (CENTER), CONFIRMING THE SUCCESSFUL EXECUTION OF THE PRODUCTION PROCESS © IDSA / Lutz Kampert
IDS leaves a footprint in European research – these projects are important pillars in order to bring IDS to life, to develop fundamental concepts, to test first proofs of concepts and to stimulate adoption and proliferation of IDS concepts.

**AMable (AdditiveManufacturABLE)**

**Short description**
Enabling adoption of additive manufacturing (AM) technologies by SMEs in order to facilitate the development of innovative business and service models, and new value chain models, in a fully digital environment.

**Overall goal**
Bringing innovative ideas and business cases to life and making innovations additively manufacturable (AMable).

**BOOST 4.0 – Big Data for Factories**

**Short description**
Boost 4.0 is the biggest European initiative in big data for Industry 4.0. With a budget of 20 million euros, and leveraging 100 million euros of private investments, Boost 4.0 will lead the proliferation of the European Industrial Data Space to improve Europe’s competitiveness regarding Industry 4.0. Furthermore, the project will guide the European manufacturing industry in leveraging big data for factory processes.

**Overall goal**
Providing the manufacturing industry with the necessary tools to exploit the full benefit of big data.

**AI4EU (Artificial Intelligence for the EU)**

**Short description**
AI4EU is the European Union’s landmark artificial intelligence project, which seeks to develop a European AI ecosystem bringing together the necessary knowledge, algorithms, tools, and resources, making it a compelling solution for users.

**Overall goal**
Mobilizing the entire European AI community to make AI’s promises real for European societies and economies, and creating a leading collaborative European AI platform to nurture economic growth.
QU4LITY (Digital Manufacturing Platforms for Connected Smart Factories)

Short description
QU4LITY demonstrates – in a realistic, measurable, and replicable way – an open, certifiable, highly standardized, SME-friendly, transformative, shared, data-driven product and service model for zero-defect manufacturing (ZDM) for Factory 4.0 scenarios, and it does so by means of five strategic ZDM plug&control lighthouse equipment pilots and nine production lighthouse facility pilots.

Overall goal
Demonstrating how the European manufacturing industry can build unique and tailor-made ZDM strategies and competitive advantages through an orchestrated open-platform ecosystem, ZDM-atomized components, and digital enablers across all phases of product and process lifecycles, building upon the QU4LITY autonomous quality model to meet Industry 4.0 ZDM challenges.

DIH² (Digital Innovation Hubs)

Short description
DIH² is a network of twenty-six DIHs aiming at supporting SMEs in agile production (i.e. 50 % increase in productivity) and unleashing their digitalization potential by enabling robot solutions that are more cost-effective at smaller lot sizes. DIH² will transform this network into a self-sustainable non-profit association with members all over Europe (the goal is to include over 170 DIHs). DIH² will demonstrate that publicly funded research can help SMEs and mid-caps achieve digital excellence and global competitiveness by adopting advanced robotics solutions in agile production.

Overall goal
Sparking incremental (cut 50 % of cost of advanced robotics solutions, double the growth of robotics market) and disruptive (maximum productivity and optimum agility) innovations in over 300,000 manufacturing SMEs and mid-caps.

Musketeer – Machine Learning to Augment Shared Knowledge in Federated Privacy-Preserving Scenarios

Short description
The massive increase in data collected and stored worldwide calls for new ways to preserve data privacy while still allowing data sharing among multiple data owners. Data can continue to be stored in different locations with different privacy constraints, but data sharing needs to be secure. The MUSKETEER cross-domain platform will validate progress in the industrial scenarios of smart manufacturing and healthcare. MUSKETEER strives to create machine learning models over a variety of privacy-preserving scenarios, ensure security and robustness against external and internal threats, provide a standardized and extendable architecture, demonstrate and validate the solutions in two different industrial scenarios, and enhance the data economy by boosting data sharing across domains.

Overall goal
Creating a validated, federated, privacy-preserving machine learning platform to be tested on industrial data that is interoperable, scalable and efficient enough to be deployed in real use cases.

Alleviating data-sharing barriers by providing secure, scalable and privacy-preserving analytics over decentralized datasets using machine learning.
MARKET 4.0 – A Multi-Sided Business Platform for Plug and Produce Industrial Product Service Systems

Short description
MARKET4.0 will offer advanced web presence of production equipment SMEs extended with additional functionalities, such as simulations or VR/AR capabilities. It will also be a P2P Industrial Data Space that offers smart user services, a secure API to try and test the digital twin of the production equipment, on top supplier and customer data that enable direct transaction between market peers (supplier-to-supplier, supplier-to-customer, customer-to-supplier and more) during the whole B2B process from equipment search to procurement and commissioning. MARKET4.0 will create trust in the business transaction between the SME production equipment manufacturer and the customer, as indicated in in the IDS reference architecture.

Overall goal
Defining, developing, and validating an open, multi-sided marketplace, based on a trusted P2P data sharing infrastructure for Industry 4.0, which brings together Industrial Product Service Systems (IPSS) providers (supply side) and customers (demand side), and which allows direct interaction among the different sides in order to improve the sales power of production equipment SMEs.

MIDIH (Manufacturing Industry Digital Innovation Hubs)

Short description
MIDIH is a one-stop shop of services granting manufacturing SMEs access to the most advanced digital solutions, the most advanced industrial experiments, pools of human and industrial competencies, the “ICT for Manufacturing” market, and financial opportunities.

Overall goal
Leveraging networks of local Competence Centers specialized in peculiar aspects of the CPPS/IIOT (Cyber Physical Production System / Industrial Internet of Things) technologies and able to attract, mentor and nurture local manufacturing SMEs towards Industry 4.0 projects, experiments, and business.

Establishing a common platform of knowledge, methods, and collaboration tools to be shared among the members of the MIDIH network, allowing cross-fertilization, continuous improvement, and open innovation.

These projects have received funding from the European Union’s Horizon 2020 research and innovation program under grant agreements N°825619, N°768775, N°780732, N°824964, N°825030, N°822064, N°767498 and N°824988.
Small and medium-sized enterprises specializing in the field of cyber-physical production systems and the industrial internet of things can now apply for funding under the MIDIH (Manufacturing Industry Digital Innovation Hubs) project. Eligible for funding (up to 60,000 euros per project) are SMEs implementing use cases of the MIDIH reference architecture.

To receive funding under MIDIH, projects must aim at complementing the functionality of the MIDIH reference architecture and conducting experiments in CPS and IoT (based on the components provided by the architecture).

Experiments must cover one of the three major MIDIH scenarios:

- Smart Factory,
- Smart Products, or
- Smart Supply Chain.

Each project must be executed in collaboration with one of the nine Competence Centers within the MIDIH network and, thus, be in line with the respective research topic.

MIDIH is an R&D project funded by the European Commission. Partners in the MIDIH consortium are IDSA and Fraunhofer IML (Fraunhofer Institute for Material Flow and Logistics), among others.

For more details, please visit: https://midih.eu/opencall_2.php
Europa braucht dringend eine neue Währung – Digital-Trust, fordert Ulrich Störk.

Ohne Vertrauen keine Daten


Vielmehr brauchen wir eine – mindestens Europa übergreifende – Datenkonvention, etwa in Anlehnung an die Menschenrechtskonvention. Dazu gehören das Recht auf Datenzugang, das Recht auf Datenintegrität und das Recht auf Datensicherheit. In diese Richtung zielen auch die Cybersecurity-Zertifikate für Produkte, Prozesse und Dienstleistungen, die die EU noch in diesem Jahr auf den Weg bringen will. Denn entscheidend am Ende das Vertrauen der Menschen in die digitalen Möglichkeiten.

At the celebration of @Fraunhofer’s 70th anniversary, #AngelaMerkel talks about the importance of the #internationaldataspace, especially with regard to data economy and the added value of shared data.

#70JahreZukunft #sharingdataisbetterthanplayingalone

Twitter - International Data Spaces Association - @ids_association - May 13th, 2019

Read more here

Delegates from ministries and institutions in Malaysia, Singapore and Vietnam visiting our booth. @Christoph_IDSA introducing the use cases from our members. @FIWARE @Idento_one @SetlogGmbH @deutschetelekom @DATAAHEAD @nicos_AG @IBM @thyssenkrupp

Twitter - International Data Spaces Association - @ids_association - April 3rd, 2019

Read more here
“Recently we received a request from Maryland, USA, to set up a secure #DataSpace. Does it need more to prove that #InternationalDataSpaces arrived in the global world of business?” said @Fraunhofer President Reimund Neugebauer during the Night of Innovations at #hm19 #ids

Twitter - International Data Spaces Association - @ids_association - April 1st, 2019

The value propositions of the IDS, such as standardization, interoperability, usage control and data sovereignty, are critical to the successful digital transformation of SMEs in Europe.” emphasizes @ub1953 @nicos_AG at #IDS_HLSE

Twitter - International Data Spaces Association - @ids_association - Feb 22nd, 2019

Our new position paper Open Data Spaces is out now! For an overview of the current state of #opendata as well as potentials of joining the principles and technologies of Open Data & #IDS have a look here http://tinyurl.com/y9yyycap @fraunhoferfokus @Fraunhofer @FraunhoferISST

Twitter - International Data Spaces Association - @ids_association - Feb 7th, 2019

BM @AnjaKarliczek eröffnete heute Event zur International Data Spaces (IDS)-Initiative (@ids_association) von @Fraunhofer Dort treffen sich ExpertInnen aus Forschung, Industrie & Politik, um Ergebnisse vorzustellen & Entwicklungen für sicheren Austausch von Daten zu diskutieren.

Today, Federal Minister @AnjaKarliczek opened event on International Data Spases (IDS) Initiative (@ids_association) by @Fraunhofer, where experts from research, industry & politics meet to introduce results & discuss developments for secure exchange of data.

Twitter - BMBF - @BMBF_Bund - Feb 22nd, 2019

TNO wordt Nederland ‘datadeling-hub’: TNO wordt de Nederlandse IDS Hub, een Europese standaard voor onafhankelijke en gecontroleerde data-deling. Daarvoor hebben de International Data Spaces Association (IDSA) en TNO gisteren een overeenkomst getekend...

TNO becomes a Dutch ‘data sharing hub’: TNO becomes the Dutch IDS Hub, a European standard for independent and controlled data sharing. The International Data Spaces Association (IDSA) and TNO signed an agreement for this yesterday...

Twitter - Channelweb NL - @ChannelwebNL - March 19th, 2019
@IMTFrance signs an agreement with @ids_association at #VivaTech and becomes the French IDSA hub. With this agreement, #IMT will mobilize the French ecosystem to develop a promising European standard for secure and sovereign data sharing.

Twitter - IMT - @IMTFrance - April 3rd, 2019

Voorzitter van FME en Smart Industry Ineke Dezentjé Hamming heeft op de Hannover Messe een Nederlands-Duitse Actie-agenda aangeboden aan staatssecretaris van Economische Zaken en Klimaat Mona Keijzer. De agenda is een samenwerkingsverklaring tussen Nederlandse en Duitse partijen op het gebied van Smart Industry om de gezamenlijke concurrentiepositie te versterken en digitalisering te versnellen.

Chairman of FME and Smart Industry Ineke Dezentjé Hamming presented a Dutch-German Action Agenda to State Secretary for Economic Affairs and Climate Mona Keijzer at the Hannover Messe. The agenda is a declaration of cooperation between Dutch and German parties, [inter alia IDSA] in the field of Smart Industry in order to strengthen the joint competitive position and accelerate digitisation.

LinkedIn - Smart Industry - Dutch Industry fit for the future - April 2nd, 2019

Read more here
“Achieving Market Adoption”
2nd IDSA Summit at the Deutsche Telekom Campus Bonn

After the successful premiere of the 1st IDSA Summit last year at PwC Frankfurt, the International Data Spaces Association will go into the next round. The 2nd IDSA Summit will take place June 25th/26th at the Telekom Campus in Bonn.

At the 2nd IDSA Summit, you will have the opportunity to enjoy a creative atmosphere. We are looking forward to:

- interactive workshops on latest topics like data ethics, blockchain and data marketplaces;
- well-known speakers like Ursula Morgenstern, CEO Atos Germany, Alexander Haid, CEO Caruso Data Marketplace, Henk Jan Vink, Managing Director TNO, and many more;
- demonstrating trusted data sharing scenarios for additive manufacturing (IBM, thyssenkrupp), data trustees (Bundesdruckerei) and even on Mars (Fiware, Innovaalia);
- presenting ‘IDS_ready’, the seal for a trustworthy data exchange, which makes the IDS concepts ready for commercial use;
- announcing 21 interactive sessions, 15 speeches and presentations, and 18 use case pitches.

For more information please go to: https://www.internationaldataspaces.org/2nd-idsa-summit-2019/
EVENTS

SICK AG to Host Quarterly IDSA Meetings in September

The next meetings of the IDSA Working Groups (WGs) will take place in the beautiful Black Forest. On September 11th, the members of WG Architecture will meet at Gisela Sick Bildungshaus in Waldkirch (from 8 a.m. until 3 p.m.); one day later, WG Certification will get together in SICK's business premises (Room H 1.002, also from 8 a.m. until 3 p.m.).

To view the agendas, please go to:
https://industrialdataspace.jiveon.com/community/idsa-homepage/events-list

Save the Date: 2nd IDSA Winterdays Will Take Place December 3rd to 5th, 2019

The 1st IDSA Winterdays in Berlin in December 2018 were a great success. The next meetings of the IDSA Working Groups in December will be enriched by workshops, oral presentations, and use case presentations.

The city and venue of the 2nd IDSA Winterdays has yet to be determined. It will soon be announced on:
www.internationaldataspaces.org
Since its first incarnation in 2015, the IoT Solutions World Congress in Barcelona has grown to become the global reference for everything related to the industrial internet of things, and the most important annual meeting for stakeholders to establish new partnerships regarding IoT. Last year, the event was joined by more than 16,000 visitors from over 100 countries. It featured over 400 speakers and 300 exhibitors, sponsors, and partners. Among them: IDSA.

On October 29th and 30th, IDSA will again be present at the event, together with a number of member organizations. At booth #227/229, the partners will be presenting the latest milestones in the evolution of IDS, such as IDS_ready and Version 3.0 of the IDS-RAM. In addition, member organizations will be presenting their IDS use cases, showcasing how the IDS data architecture is bringing innovative cross-company business models into life.

For more information on IoT Solutions World Congress 2019, please go to: https://www.iotworldcongress.com/
SHARING DATA WHILE KEEPING DATA SOVEREIGNTY

THE POTENTIAL OF IDS FOR THE DATA ECONOMY

DATA SPACES_NOW!
Today, there is a common understanding that data is of high value. Leveraging this value and trading data creates huge revenues for the large data platform providers. Rarely, the creators of data are benefitting from this value in an adequate way. Often, only the cost for data creation and management remain with them. Furthermore, many give their data away for free or pay with it for the use of a service. Finally, others keep it for themselves without taking advantage of the value.

There is a need for vendor independent data ecosystems and marketplaces, open to all at low cost and with low entry barriers. This need is addressed by the IDSA, a non-profit organization with today about 100 members from various industrial and scientific domains. The IDSA specified an architecture, interfaces and sample code for an open, secure data ecosystem of trusted partners.

The specification of the IDSA forms the basis for a data marketplace based on European values, i.e. data privacy and security, equal opportunities through a federated design, and ensuring data sovereignty for the creator of the data and trust among participants. It forms the strategic link between the creation of data in the internet of things on the one hand side and the use of this data in machine learning (ML) and artificial intelligence (AI) algorithms on the other hand side.

Digital responsibility is evolving from a hygiene factor to key differentiator and source of competitive advantage. Future data platforms and markets will be built on design principles that go beyond our traditional understanding of cybersecurity and privacy. Based on strong data ethics principles the IDS Reference Architecture Model puts the user in its center to ensure trustworthiness in ecosystems and sovereignty over data in the digital age as its key value proposition.

IDSA defines a reference architecture, which supports sovereign exchange and sharing of data between partners independent from their size and financial power. Thus, it meets the needs of both large and small and medium enterprises (SMEs). Further down the road, it may be taken up by individuals as well. Whether data of IoT devices is concerned, in on-premise systems or cloud platforms, the IDSA aims at providing the standard for sharing data between different endpoints while ensuring data sovereignty.

The IDSA aims at reducing the entry barriers and, thus, the cost of data sharing and exchange. Finding and authenticating appropriate transfer partners will be substantially facilitated, so will the legal and commercial governance of transactions. This goal is achieved by creating a semantic standard for data sovereignty, i.e., the rules and policies that determine who is allowed to do what in which context with the data shared by the data owner. This is a key prerequisite for connecting the various existing and emerging proprietary platforms.

The IDS allows ecosystem partners to define software readable contracts attached to the data. The contracts are based on usage control rules like duration of use, forwarding of the data etc. Furthermore, the purpose and cost of data use can be specified. IDS certified software allows for modelling, configuring, monitoring and enforcement of the rules and policies specified in data contracts.
Making IDS a standard for sovereign data sharing is a continuous interaction between integrating new technologies and eliciting new requirements. Clearly defined working streams and bodies form a vital user driven association that brings IDS to life.

Start of IDSA as global user driven initiative

Continuous integration of new technologies and requirements
ADVANTAGES OF MEMBERSHIP:

- Design and define IDS reference architecture and standards.
- Be frontrunners in adoption and proliferation of IDS components and technology.
- Meet the digital native companies and people shaping the future of the data economy.
- Find like-minded people realizing new ideas and business scenarios.

Become a member:
www.internationaldataspaces.org/en/become-member/

DATA SPACES NOW!

IDS is a standard for the semantics of data exchange and for data sovereignty