IMPLEMENTING THE EUROPEAN STRATEGY ON DATA
ROLE OF THE INTERNATIONAL DATA SPACES (IDS)
A MATTER OF URGENCY
Sources for competitive advantage and societal prosperity have been transforming since the early days of the European Union. With its early focus on steel and mining, the Lisbon strategy created the vision of becoming the most competitive market in the world. Today’s changing economic environment is dominated by the evolution of ecosystems and the proliferation of platform business models. Again, the Digital Single Market has to transform in order to channel the pressure that is currently put on Europe’s economic model by hyper-scaling cloud platforms on the one hand and state-controlled digital strategies on the other hand.

Big opportunities lie ahead of Europe’s development path. It is clear that artificial intelligence (AI), robotics and data are part of the most strategic resources for future economic growth and societal models that preserve European values such as openness, participation and equal access to knowledge.

In particular, data fuels the platform-based business models and ecosystems – and Europe has lots of it.

EUROPEAN DATA STRATEGY
The European Commission laid down a strategic pathway to leverage data in the best possible way for the sake of the European citizens and the Digital Single Market. The European Data Strategy creates the vision of a European Data Space which adheres to rules that are directly derived from fundamental European values. It envisages the “flow of data within the EU and across sectors” and is based on the FAIR principles when it comes to the access, management, and use of data.

The European Data Strategy rests on four pillars:

• Governance framework for access and use;
• Investments in Europe’s data capabilities and infrastructures;
• Competences and skills of individuals and SMEs;
• Common European data spaces in nine strategic areas such as industrial manufacturing, mobility, health, and energy.

The strategy rightly concludes that the »EU has to seize its window of opportunity in the data economy«.

At this very moment of crisis the need for a functioning European Data Space is there for all to see. Both, fair access to data that ensures data sovereignty of the individual and trust in the use of the data are considered a key capability in the battle against the spread of the Corona virus. If Europe already had had an up and running European Data Space at the beginning of this year, it would have been better equipped to respond effectively to the Corona crisis.

INTERNATIONAL DATA SPACES
The International Data Spaces (IDS) initiative aims at cross-sectoral data sovereignty and data interoperability. It sets forth a Reference Architecture Model basing on open standards and contributing
to global standards. By specifying data usage constraints, it defines the terms and conditions for the data economy and by describing an open software architecture and publishing open source software codes it ensures maximum adoption.

The initiative was founded as a non-profit organization, the IDS Association (IDSA). IDSA has more than 110 members from more than 20 different countries. Started in Germany, regional IDS Hubs in the Czech Republic, Finland, France, Greece, Italy, the Netherlands, and Spain make it a true European initiative. Further hubs exist abroad (e.g. in Brazil) and others are just before kick-off (e.g. in Japan). Communities apply the IDS Reference Architecture Model in various domains such as mobility, logistics, healthcare etc.

IDSA is connected to many relevant initiatives across the globe including BDVA, FIWARE, the Industrial Internet Consortium, the Industrial Value Chain Initiative, and the Plattform Industrie 4.0. IDSA and its member organizations participate in more than 20 European research projects, mainly in the Horizon 2020 program. Technologies are continuously maturing and deployed in many productive environments.

IDSA is also an integral part of GAIA-X which is aiming at a Federated Data Infrastructure for European ecosystems.

IDS CONTRIBUTION
IDS is not a blank sheet but a vivid and strong initiative which already proved that it is ready to take responsibility for implementing the European Data Strategy and help creating the European Data Space.

IDSA is offering the following:

• Contribute knowledge and technology to the envisaged high impact project on European data spaces;
• Provide data infrastructure services to the operations of the nine European data spaces through its support organization;
• Provide advisory, knowledge and expertise to the European Data Act;
• Provide a community of practice and a network of hubs and collaborations to support knowledge sharing and build up required skills in the data economy across Europe and beyond European borders.

In doing so, the implementation of the European Data Strategy will benefit from an established network of expertise, data spaces knowledge embodied in a mature reference architecture model, and software artefacts ready to use, which will speed up »time to market« of strategy implementation.

IDSA looks back on five years of paving the way for a fair data economy in Europe and is ready to go.

CALL FOR ACTION
It is high time to act. IDSA is asking policy makers of its member states and on European level to both support the IDS initiative and help leverage its full potential for the benefit of data sovereignty in the European Single Market.

The list of required measures includes the following:

• Making the IDS Reference Architecture Model (IDS RAM) a blueprint for the European Data Space in order to speed up its implementation in nine strategic areas;
• Leveraging the IDSA assets such as its member community and hub structure to create awareness for the relevance and urgency of data sovereignty and to disseminate the European values for the data economy;
• Supporting adoption and deployment through funding of application projects and investment in competitive data sovereignty service providers in Europe;
• Supporting IDS-based standardization – e.g. on European level at the CEN and international level at ISO – and IDS use in public tenders;
• Promoting an »Architecture of Standards« – including for example the IDS RAM – as proposed by the GAIA-X initiative as the comprehensive technology standard framework for cloud and data sovereignty in Europe.

The IDS initiative is ready to go.