

Smart and innovative solutions must fall into at least one of the following areas:

A	Solutions to increase efficiency of production processes	Solutions linked to production processes, such as ERP (Enterprise Resource Planning) and MES (Manufacturing Execution System) based solutions. Those are increasing efficiency, quality and control at the level of the production floor or the company as a whole (including supply chain, KPIs, planning...).
B	Solutions for effective human resource management systems	Solutions linked to managing internal resources, such as resource management and allocation, skill and performance management, training administration, etc.
C - Novel technologies:		
1	Smart supply network	Smart Supply network allow transparency over supplier inventories and vehicle logistics for automatic and optimized supply decisions.
2	Next-gen manufacturing systems	Next-gen manufacturing systems make automated and smart decisions (e.g. production scheduling), offer intelligent machine applications, seamless engineering integration and allow for remote visualization, monitoring, control, alerts, production scheduling and execution.
3	Cloud storage / processing	Cloud storage/processing offer data storage and application processing on secure cloud servers.
4	Data analytics	Data analytics is based on advance decision algorithms & real-time analytics.
5	Cybersecurity	Cybersecurity offer encrypted data and protection mechanisms against cyber threats.
6	Intelligent sensors/actors	Intelligent sensors/actors are deeply integrated in machines, wirelessly stream data and have an own analytics engine (edge analytics).
7	Cyber physical systems	Cyber physical systems are interconnected systems and social machines that control physical entities.
8	Smart maintenance	Smart maintenance of machines becomes integrated (autonomous) aided by predictive algorithms and remote assistance systems.
9	Mobile workforce	Mobile workforce equips workers with mobile devices and augmented reality devices to process real-time information.
10	Self-driving vehicles	Self-driving vehicles make possible that material is handled via autonomous vehicles and intelligent transportation units.
11	Intelligent products	Intelligent products carry relevant information for machines to make decisions.
12	Additive manufacturing	Additive manufacturing offer 3D printing that allows rapid prototyping and rapid spare part printing. Technologies turn more and more to real products with new design
13	Robotics	Robotics offer use of flexible robots augments intelligence, automates certain processes and creates new forms of worker-robot interaction.
14	Advanced materials	Advanced materials are new materials such as nanomaterials as well as integrated computational materials engineering (ICME).
15	Responsive manufacturing	Responsive manufacturing are individual manufacturing steps that are designed for customer interaction so that product can be tailor-made for customers.
16	Physical and cognitive assistance	Physical and cognitive assistance provides optimized assistance for the worker in the factory, such as Physical (e.g. Robots, Exo skeletons..) and cognitive (e.g. via Handhelds, Voice)