

## Business plan 2024

The business plan describes goals and overall activities for The Swedish Arena for Additive Manufacturing of Metals (AM-Arena), which are prioritized and planned for 2024.

### **Background**

The AM-Arena started in August 2016 and since then the metal AM activities in Sweden have increased, in both industry and academia and in joint actions. However, metal AM is a fast-paced industry, and the number of companies interested in implementing AM is still increasing. Thus, the need for an organization for knowledge mapping and networking remains.

The business plan for 2024 is based on 6 active and 10 basic industrial members (including one science park) and 14 active academic members (including institutes). 9 of the industrial members are SMEs.

The focus for 2023 was on networking and sharing knowledge around the prioritized challenges identified in the RAMP-UP roadmap emphasizing quality assurance, with the long-term ambition to shift from technology push to market pull. This work will be continued during 2024.

Moreover, within the last couple of years, a number of networks and ecosystems have been established in Denmark, Finland, and Norway to increase AM adoption in their respective countries. In 2024 the AM-Arena will act as an interface and entrance point to metal AM in Sweden and the Nordics and push for collaboration and coordination.

The AM-Arena PhD network currently has 51 members, and in 2023 it took the first steps towards becoming a Nordic network, with PhD students from Denmark and Norway joining. For 2024 the work will focus on further expanding the network within the Nordics, as well as enhancing its connection to industry partners.

### **Aim**

The Swedish Arena for Additive Manufacturing of Metals is a network for collaboration with the goal to increase adoption and speed up sustainable industrialization of metal AM.

### **Strategy**

This will be achieved through the following mechanisms:

- Acting as an interface and entrance point to metal AM in Sweden and the Nordic countries
- Coordinate and support needs for a digitalized and sustainable industrialization of metal AM
- Networking and knowledge sharing
- Competence development

Each mechanism is elaborated on below and the activities planned for 2024 are listed. Additionally, the aim, vision, strategy, and membership structure of the AM-Arena will be evaluated, updated, and agreed on 2024.

### Overall

Evaluate, update, and agree on aim, vision, strategy, and membership structure of the AM-Arena
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### Acting as an interface and entrance point to metal AM in Sweden and the Nordics

Subtasks and continuous activities	Activities 2024
Metal AM in Sweden: - Spread information about industrial and academic members and their activities and offers - Guidance to find partners, initiatives, and activities	- Search for funding for a shared Swedish metal AM booth on Formnext Nov 2024 and/or EuroPM Oct 2024 in Malmö
Competence and infrastructure along the value chain: - Spread information based on joint map and competence/ infrastructure database	- Finalize updates and increase visibility through the home page, LinkedIn, and webinars
Home page	
Active with posts on LinkedIn	- Start using LinkedIn Events

### Coordinate and support needs for a digitalized and sustainable industrialization of metal AM

Subtasks and continuous activities	Activities 2024
State-of-the-art of industrialization and maintaining an “active” roadmap: - Share updates on the industrialization of metal AM in Sweden and the rest of the world	- Mapping initiatives and networks for increased implementation of metal AM Nordic countries
Working to secure funding; Coordination, lobby against financiers	- Follow the restructuring of Vinnova’s innovation programs and find/push for metal AM opportunities within sustainability and digitalization - Follow the implementation of Impact Innovation, as opposed to the SIP
Initiate broader joint project applications for national funding around common needs: - Be a platform to form a consortium based on discussions during networking	

Technical activities decided yearly by the technical group	- Prestudies followed by workshops on two topics
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### Networking and knowledge sharing

Subtasks and continuous activities	Activities 2024
Meetings	<ul style="list-style-type: none"> <li>- Annual meeting <b>14 March</b></li> <li>- 4 technical group meetings</li> <li>- 4 board meetings</li> <li>- 4 academic group meetings</li> </ul>
Seminars, workshops, conferences	<ul style="list-style-type: none"> <li>- Academic conference <b>10-11 Jan</b></li> <li>- Additive Intelligence 4.0 <b>12-13 Mar</b></li> </ul> <p>Together with AMC RISE, SVEAT, CAM2, AM4Life</p> <ul style="list-style-type: none"> <li>- Powder Meet <b>27 Nov</b></li> </ul> <p>Together with TO80 and SFMT</p>
Information and knowledge sharing	<ul style="list-style-type: none"> <li>- 4 webinars: organized by PhD network to increase the connection between the PhD students and industry</li> <li>- 4 newsletters</li> </ul>
Dissemination of results	<ul style="list-style-type: none"> <li>- At the academic conference</li> </ul>
PhD network	<ul style="list-style-type: none"> <li>- Develop the PhD student network and invite Nordic PhD students</li> <li>- PhD network visit in industry</li> </ul>

### Competence development

Subtasks and continuous activities	Activities 2024
Coordination of education on different levels based on industrial needs: <ul style="list-style-type: none"> <li>- Spread information based on the joint education map</li> </ul>	<ul style="list-style-type: none"> <li>- Input from the technical group about gaps in education</li> <li>- Update the map with new courses</li> </ul>

### Members

3D MetPrint, Additivt Teknikcenter, AIM Sweden, Carpenter Powder Products, Chalmers University of Technology, Dalarna University, Duroc Laser Coating, Epiroc, Freemelt, Höganäs, Kanthal, Karlstad University, KTH, Lasertech LSH, Linköping University, Luleå University of Technology, Lund University, Mid Sweden University, Quintus Technologies, Scania, Jönköping University (School of Engineering), RISE, Sandbacka Science Park, Siemens Energy, Swerim, TRUMPF Maskin, University West, Uppsala University, VBN Components, Örebro University