

BUSINESS INNOVATION SYMPOSIUM (E6)
Innovation, Entrepreneurship & Investment: The Microscopic Perspective (1)

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INNOVATION AND R&D AT OHB SYSTEM: INNOVATION FROM AN UPCOMING LSI'S POINT
OF VIEW

Abstract

Within this paper an overview of the tools and mechanisms is given used by OHB System to manage internal and external innovations. OHB has grown within a few years from an SME status to the third largest Lead System Integrator (LSI) in Europe. Trigger for this was the very successful management of the German Bundeswehr Radar surveillance satellite constellation (6 LEO satellites) SAR-Lupe. This place OHB in a unique position to bid and surprising to most win, the first and second batch of Europe's GNSS satellite system Galileo (22 MEO satellites). This line of success continued with several Telecommunication- (Hispasat AG1, EDRS-C and the Electra all-electric platform) and Earth observation satellites (EnMap SARah). OHB owes most of its success in the recent years to empowering employees and letting them actively propose and manage new innovations and business lines. This approach works especially well in OHB's unique company culture with flexible processes and a flat-hierarchy, due to it being a family owned company. This has resulted to a very innovative way of designing and building satellites such as: • A highly modular satellite design encouraging suppliers to cooperate in the design on a system level • Serial production methods allowing for cost reductions in the production process (experience from the Galileo constellation) • High degree of cooperation with SMEs and Research institutes in order to foster innovations This paper will show how OHB's staff are given incentives for introducing new ideas and how an active market outlook leads to the fostering of innovations through the company. In order to keep fostering new ideas, a number of methods are applied which will be explained in the paper:

- Employee innovation prizes
- Bottom-up innovation pull
- Top-down innovation push
- Rigorous technology roadmapping practices
- Market outlook and business plans
- Disruptive technology searches
- Supplier industry days
- Quick innovation assessment brainstorming sessions

Currently these practices have resulted in several cutting edge innovations developing in rapid cycles which differentiates us to some extent from our competitors (e.g. all-electric satellites, additive manufacturing processes, advanced avionics solutions based on optical fibers, highly modular panel design, advanced thermal management solutions) In the end, this paper concludes with giving some recommendations for companies looking to manage their innovation process and extend an open invitation to get involved within the OHB innovation process.