

Global Links - Four strategies for GigaHertz Centre

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VINNOVA and COMPERA workshop

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GigaHertz Centre 2007-2016

An international consortium between Chalmers University of Technology and leading companies for bringing research advances in microwave engineering and components faster to industry

CHALMERS



- Research projects:
 - High-efficiency power amplifiers
 - GaN HEMT MMIC design & technology
 - Low phase-noise integrated oscillators
 - THz components and circuits
- System targets:
 - Cellular radio base stations
 - Microwave radio links
 - Defense radar systems
 - Satellite radiometers



STRATEGY 1:

Target international company partners to complement Swedish industry

- GHz Centre: Component developers meet system houses
- A consortium agreement saves much time and effort in the legal negotiation
- Concrete examples:
 - Board members from four countries
 - Adjunct Professor from one international partner (NXP, Holland)
 - Industrial circuit engineers from Japan coming to Chalmers
 - Chalmers visits at Infineon, Villach, Austria
 - Regular int. project meetings, workshops and GHz Centre Annual Day

STRATEGY 2: Select the best international experts as advisors

- Four independent international experts as Centre advisors
- Regular visits every GHz Centre Annual Day
- Much easier to convince the best in the world to join if GHz Centre invites rather than Chalmers!

GHz Centre IAB Stage 2:

- Fadhel Ghannouchi, Univ Calgary, Canada
- Joy Laskar, GeorgiaTech, US
- Larry Larson, Univ California San Diego, US
- Marianne Germain, IMEC, Leuven, Belgium

STRATEGY 3: Develop networking and industrial lobbying in EU

- GHZ Centre has initiated a European industrial-academic network: European Radio and Microwave Interest Group - EuRaMIG
- Home page has been launched - www.euramig.org
- A core group consisting of representatives from nine EU countries have regular meetings
- Result: One position paper, one vision paper, a roadmap description, impact on ICT WP 09-10 and a regular workshop at the European Microwave Week
- One meeting held with European Commission in Brussels. One is under planning with EC-ESA-EDA
- Is already used to initiate EU FP proposals



STRATEGY 4: Improve mobility of researchers by increased international academic collaborations

- Use the centre as a starting ground for international academic collaborations. These shall complement and extend our skills.
- Essential to communicate with industrial partners
- Legal issues may be complicated
- Concrete examples:
 - Cardiff University, Wales Done 2009
 - Telecom Bretagne, Brest To be started Feb 2010
 - University of Calgary Under planning 2010
 - University of California, San Diego Under planning 2010

