



# THz for Communications

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# SFI RESEARCH CENTRE INVOLVING 10 INSTITUTIONS



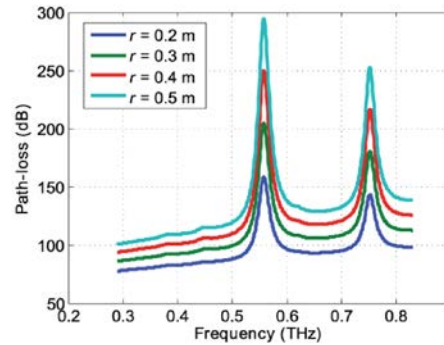
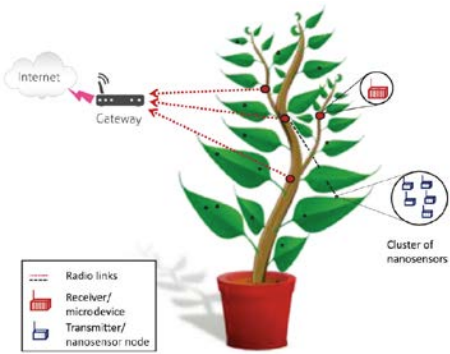
Phase 1: 2015-2020, ~300 researchers, ~€75m budget

# THE CONNECT **INDUSTRY** PARTNERS



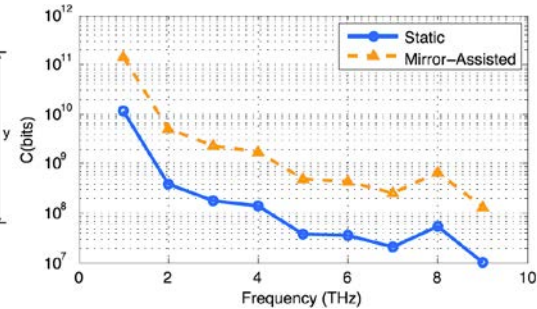
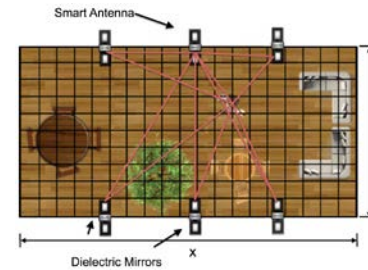
# THz Communications Scenarios

## Crop monitoring Wireless Nanosensor Nets



Afsharinejad, A. Davy, B. Jennings & C. Brennan,  
"Performance Analysis of Plant Monitoring  
Nanosensor Networks at THz Frequencies,"  
*IEEE Internet of Things Journal*, 3(1):59-69, 2016.

## Mirror-assisted Coverage for 5/6G Small Cells



M. T. Barros, R. Mullins & S. Balasubramaniam,  
"Integrated Terahertz Communication with Reflectors  
for 5G Small-Cell Networks," *IEEE Transactions on  
Vehicular Technology*, 66(7):5647-5657, 2017.



# H2020 Project TERAPOD

Terahertz based Ultra High Bandwidth Wireless Access Networks

<http://www.terapod-project.eu>

September 2017 – August 2020

Coordinator: Dr Alan Davy (WIT / CONNECT)

TERAPOD has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement 761579



# TERAPOD's main objective is to advance the TRL of THz devices and systems

## Target is to demonstrate an "early adopter" Data Centre demonstrator

