

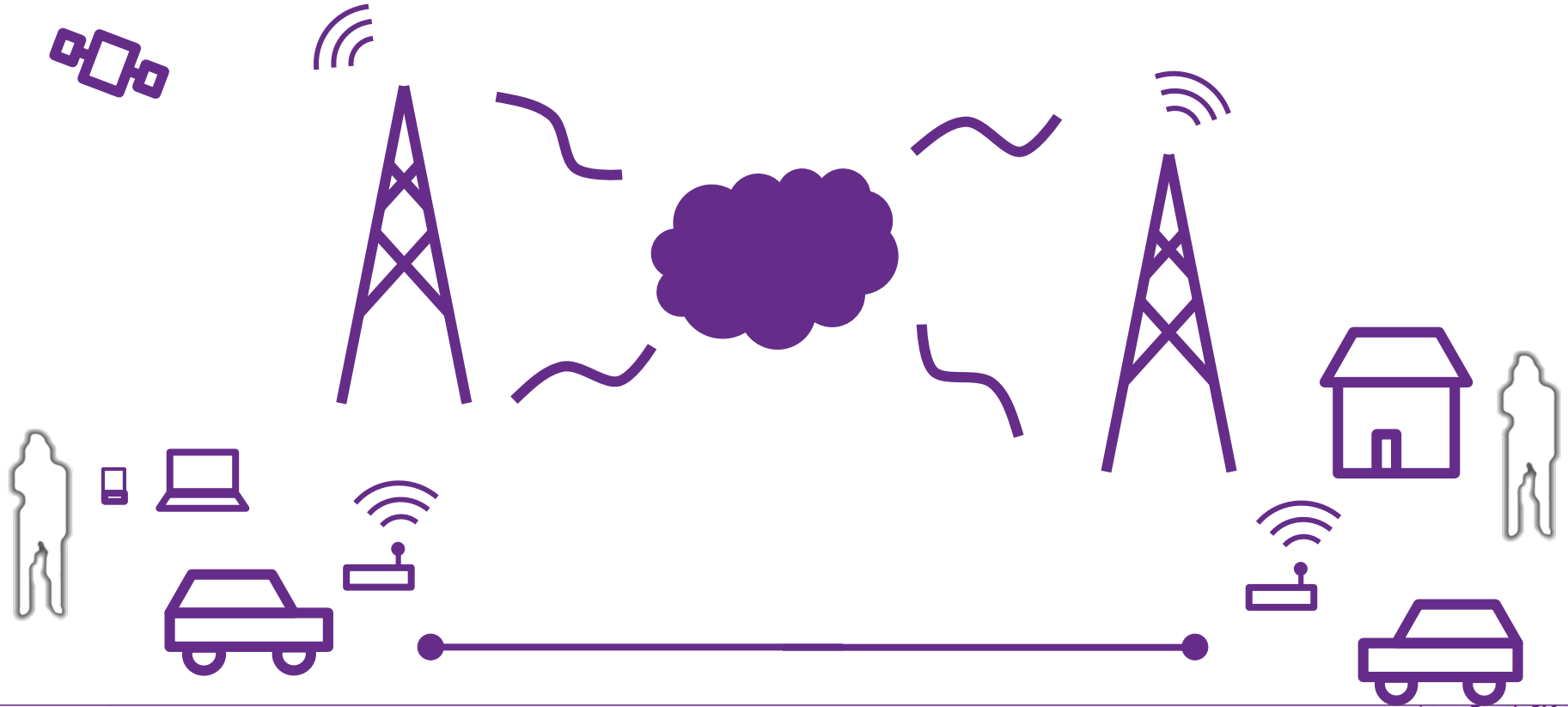
# *Plans for early 5G trials/deployments in Sweden*

Jonas Wessel

Director Spectrum Department PTS

Vice Chairman RSPG

# All communication wireless



## *RSPG roadmap for 5G in Europe*

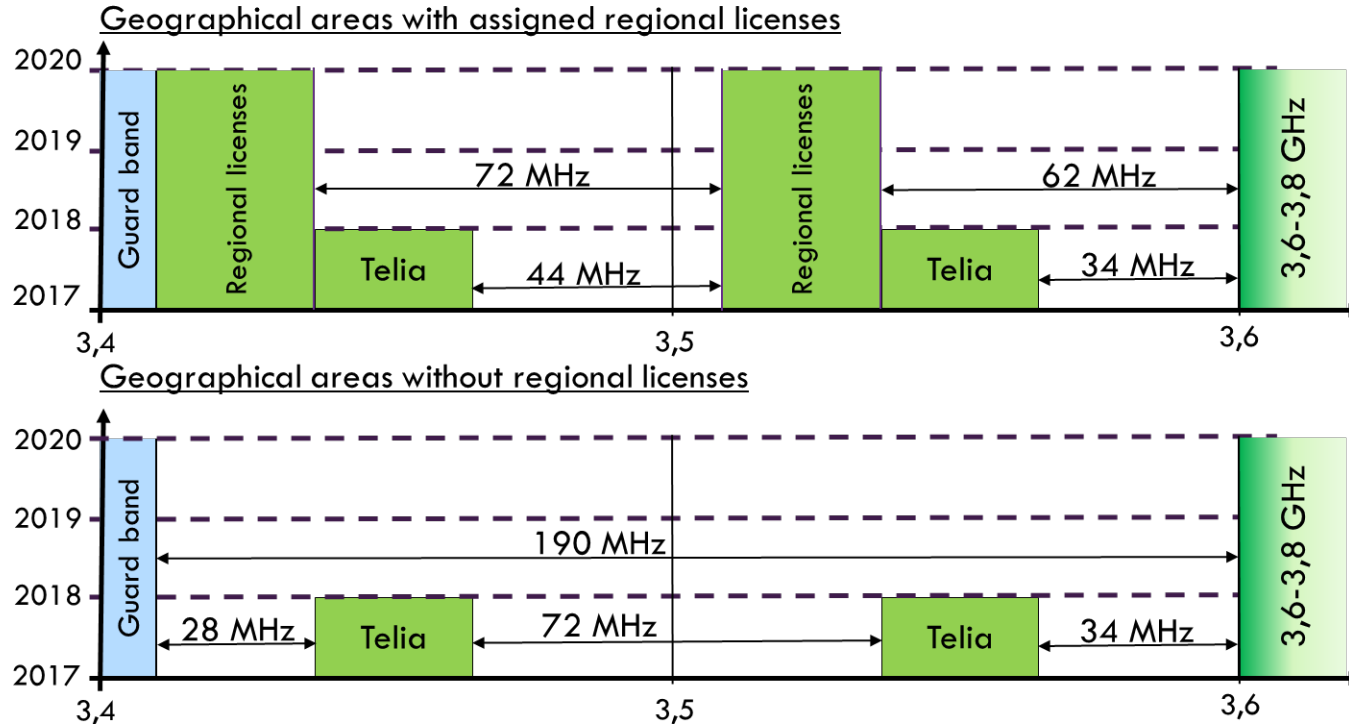
- 5G will need to be deployed below 1 GHz, particularly in 700 MHz, to enable nationwide and indoor 5G coverage
- 3.4-3.8 GHz primary band: ready for use now
- Identifies the 24.5-27.5 GHz as the high frequency pioneer band for 5G in Europe
- Ensure all mobile bands ready for 5G
- Second RSPG 5G opinion in progress

## *Plan for early 5G trials/deployments*

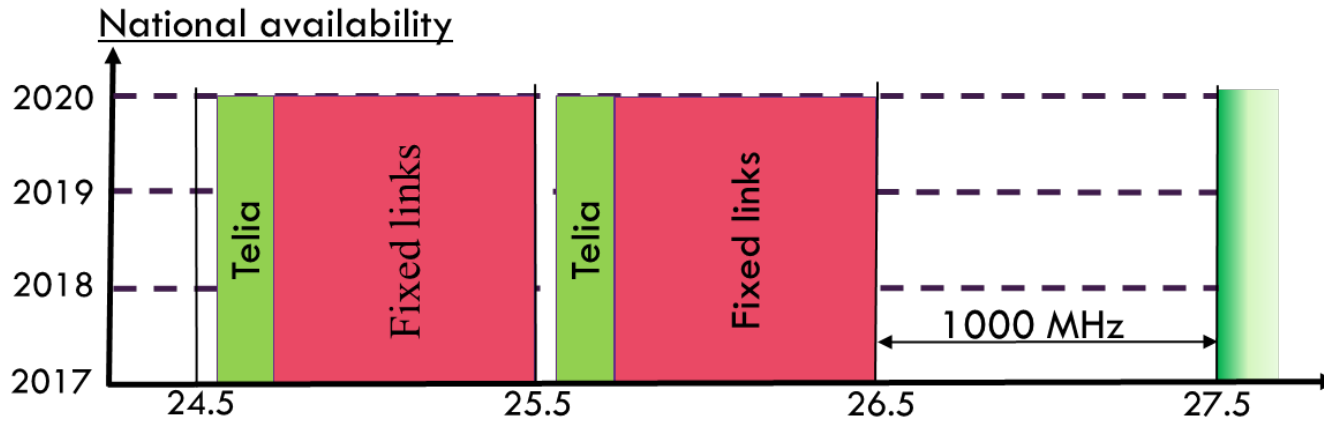
A plan for early 5G trials/deployments is underway

- The plan highlights the opportunities for large scale testing and pre-commercial trials in Sweden
- The focus is on the European 5G pioneer bands, 3.4-3.8 GHz and 26 GHz
- The plan is focused on a 2020 timeline for allocating commercial licenses in both bands

# Availability for test in the 3.4-3.8 GHz band



# Availability for test in the 26 GHz band



# *Plan for early 5G deployments*

Good situation in Sweden for licensing in a 2020 perspective

- 700 MHz expected to be licensed well before 2020
- Parts of / whole 3.4-3.6 GHz band available for licensing in 2020  
Whole band 3.4-3.8 GHz available: 2023-04-01
- 1 GHz of the 26 GHz band available for licensing in 2020  
Whole 26 GHz band (3,25 GHz) available: 2022-01-01

# *Plan for early 5G deployments*

PTS to enable 5G in the European pioneer bands in Sweden 2020

- Extensive international efforts to ensure that the harmonization of the pioneer bands will be completed in time for 2020
- Nationally we are investigating how to address the expected frequency requirements and suitable licensing methods



# We see auctions as the best way to achieve multiple goals

- Availability – timely awards
- Coverage obligations - key societal value of spectrum
- Competition - can change the competitive situation
- Fair pay - auction revenues are a factor but not seen as the primary driver
- The value of spectrum is not the sum of annual fees or the sum of auction proceeds – but rather the socioeconomic value that the use of the spectrum can give to society over time.