# Background Notes

## Stakeholder Workshop 22 November 2018, EC, Brussels

## Towards a light regulation regime for deployment of small-area wireless access points

The launch of commercial 5G services will require extensive enlargement and densification of fixed (fibre) and wireless networks, among other changes. Some mobile operators are planning to roll out 200 or more cells per square kilometre for high traffic environments. Density is projected to increase further, i.e. to support approximately one million connections per square kilometre, which could involve 1000 small cells in some scenarios.

The European Commission's 5G Action Plan invites the telecom industry, Member States, telecom regulators and other stakeholders to work with the Commission to accelerate and monitor the progress of cell deployment scenarios, in order to meet the target of uninterrupted 5G coverage for all urban areas and all major terrestrial transport paths by 2025. Actionable best practices should be identified to increase the commonality of administrative conditions and minimise processing time to facilitate small cell deployments in line with the proposed European Electronic Communications Code (EECC).

EECC Article 57 in the final text (currently 56 in the draft EECC now published publicly) states that competent authorities shall not unduly restrict the deployment of small-area wireless access points (SAWAPs). In particular, the deployment of SAWAPs meeting the characteristics laid down by implementing act of the Commission shall not be subject to any individual town planning permit or other individual prior permit.[1] That implementing act should specify the SAWAPs' technical and physical characteristics such as maximum size, height, weight and, where appropriate, emission power.

SCF Associates Ltd. has been mandated to help the Commission specify the above mentioned characteristics of SAWAPs which could be exempted from any individual town planning permit or other individual prior permits according to article 57 of the EECC in order to facilitate their deployment across the EU. Four main tasks constitute the SMART 2018-0017 study:

- Survey existing and evolving definitions of SAWAPs and small cells to determine their technical characteristics and analyse their deviations (if any) from the definition in Article 2 of the EECC.[2]

- Analyse the EU Member States' current regulatory requirements for SAWAPs and identify administrative barriers, namely: what permissions are required, at what cost, the processing time for applications, size and power limits of equipment, aesthetic considerations, etc.

[1] Competent authorities may however require permits for the deployment of SAWAPs on buildings or sites of architectural, historical or natural value or where necessary for public safety reasons.

[2] Paragraph 23 of Article 2 in the final text says: "'small-area wireless access point' means a low power wireless network access equipment of small size operating within a small range, using licensed radio spectrum or licence-exempt radio spectrum or a combination thereof, which may or may not be part of a public terrestrial mobile communications network, and be equipped with one or more low visual impact antennae, which allows wireless access by users to electronic communications networks regardless of the underlying network topology be it mobile or fixed;"

- Review the situation in non-EU countries as well as international initiatives to develop generic criteria for the exemption of SAWAPs from approval processes.

- Propose sets of characteristics and their thresholds to advise the above mentioned implementing act and to assess the socio-economic impact of each respective set.

Stakeholders are invited to register and participate in the one day workshop in Brussels on 22 November 2018, at which some preliminary findings of this study will be presented.

Participants will also be encouraged to offer their views on the following and any other issues they may introduce:-

- What kinds of local requirements should national authorities pre-empt, exclude or limit?

- What should be the conditions for exempting, or, requiring notice to local authorities, to the general public and/or to owners of nearby properties in outdoor small cell deployments?

- What base station dimensions could act as limits in defining exemptions from local permits (footprint, cabinet volume, mast height, signal range, power, etc) for SAWAPs?

- What “visual mitigation” measures can local authorities reasonably require?

- How should RF emission limitations be addressed, in the light of MIMO, beamforming, carrier aggregation and co-located installations in order to fulfil the requirements for the protection of the general public from electromagnetic fields?

- What limits are appropriate for administrative fees, and for what types of permits and their processes, including batch applications?