Project Title	Global vision, standardisation & stakeholder engagement in 5G
Project Acronym	Global5G.org
Grant Agreement No	761816
Instrument	Coordination and Support Action
Topic	Shaping the global 5G-PPP vision by strengthening the link between vertical industry, standardisation and research, focusing on potential future investments in 5G, roll-out to market, as well as policy, regulatory, spectrum and legal discussions.
Start Date of Project	01.07.2017
Duration of Project	30 Months
Project Website	www.global5g.org

D4.2 – HIGH QUALITY VIDEO

Work Package	WP4, Vertical Stakeholder Engagement and Cooperation
Lead Author (Org)	Trust-IT
Contributing Author(s) (Org)	
Due Date	31.12.2018
Date	26.06.2019
Version	1.0

Dissemination Level

X	PU: Public
	PP: Restricted to other programme participants (including the Commission)
	RE: Restricted to a group specified by the consortium (including the Commission)
	CO: Confidential, only for members of the consortium (including the Commission)

Versioning and contribution history

Version	Date	Authors	Notes
0.1	03.10.2018	Stephanie Parker, John Favaro (Trust-IT)	5G video landscape analysis
0.2	15.11.2018	Stephanie Parker, John Favaro (Trust-IT)	Video production online
1.0	26.06.2019	Stephanie Parker, John Favaro (Trust-IT)	Accompanying deliverable to video created

Disclaimer

Global5G.org has received funding from the European Commission's Horizon 2020 research and innovation programme under the Grant Agreement no 761816. The content of this document does not represent the opinion of the European Commission, and the European Commission is not responsible for any use that might be made of such content.

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Executive Summary

A high-quality video was created in order to contribute to the dissemination of awareness of the need for 5G in areas of special interest to verticals. The selected topic was Critical Communications, which is especially pertinent to many of the most important vertical sectors, ranging from automotive to public safety to energy to manufacturing.

The technological production company Tech-TV was selected for the production of the video. A storyboard was created in order to develop the theme of critical communications. As speakers, two exponents of critical communications and 5G were selected, in the persons of Peter Clemons of Quixocity, and Professor Rahim Tafazolli of the 5G Innovation Centre.

The video production was finished in time to be launched officially at ICT 2018 in Vienna. It is now online as part of the 5G PPP YouTube collection.

The Global5G.org video is the only one in the entire collection of 5G PPP videos that is specifically on the topic of critical communications, and specifically within the context of verticals. Its style and content are directed at an intelligent lay audience, without resorting to detailed technical information, and is also suitable for distribution to high-level management and decision-makers in the context of making the case for 5G in vertical sectors.

A future step is featuring the video is the final production, graphically designed publication and promotion of a 5G Roadmap for vertical industries and standardisation. The video is very well suited to such a publication since it highlights the role of critical infrastructures, and albeit indirectly, the special role of SA6 – mission critical applications in 3GPP. The Roadmap will focus mostly on 3GPP and will draw on work within the recently formed Task Force, 3GPP Market Representation Partners (3GPP MRP TF) and its workshop series, as well as relevant activities within the 5G-IA Pre-Standardization Working Group.

1   Introduction

1.1   Purpose and Scope

This deliverable reports on the high-quality video with emphasis on verticals and the launch campaign.

The purpose of this deliverable is to:

- Report briefly on the motivation for the particular selection of the topic of the video
- Report on the production used
- Report on the follow-up launch campaign.

The main deliverable, of course, is the video itself, which is available in multiple formats and is online. This is essentially a pro forma accompanying report on the background and motivating context.

1.2   Context and Positioning within the 5G PPP

There is a series of 5G PPP videos online of which this video forms a part. The formatting and style of the video was aligned with this series, including the particular 5G PPP branding in the trailer of the video. Furthermore, the branding of Global5G.org was ensured in the trailer of the video.

1.3   Structure of the document

The rest of this document is structured as follows:

Section 1: Introductoin and context

Section 2: Gives the overall motivation and development of the storyline and messages of the prospective video. It also describes the production of the video and the speakers used within the production.

Section 3: Describes the subsequent launch of the video and its addition to the portfolio of 5G PPP videos.

Section 4: Briefly draws conclusions about the position of this video within the overall context of disseminating information to vertical stakeholders about the case for 5G.

2   Video Production Schedule

2.1   Choice of location and production crew

The production crew selected was Tech-TV, a UK-based production company specializing in technology videos, which has also worked extensively for the 5G community in the past.

The location of the filming was the 5G Innovation Centre in Surrey, in order to take advantage of its prestigious facilities as a background for the video.

2.2   Development of Storyline and core messages

Given the importance of critical communications both in the 5G ecosystem and in particular for Verticals, Critical Communications was selected as the core topic of the video.

The selected title for the video was "The Need for 5G", reflecting the fact that Critical Communications need 5G for their functioning.

The following storyline was created for the core messages of the video, together with Peter Clemons of Quixocity. This is the spoken text that was used in the video.

5G Video – University of Surrey – November 16, 2018 – Peter Clemons, Quixoticity

5G is much, much more than just another generation of mobile communications. 5G heralds a new era for humankind and our physical/digital/virtual creations, allowing more agile communications service providers to deliver reliable, timely end-to-end connectivity to a very wide range of social and economic actors over smarter pipes.

What do you mean by "critical communications"?

Within in the public safety and PPDR (Public Protection & Disaster Relief) sectors, we prefer the term mission-critical communications, where communications must be maintained even when & where all other forms of communication fail and where human life itself is threatened. Some of the techniques and procedures used for mission-critical are also valid for business-critical operations, where critical business and service continuity is at stake. Traditionally, mission-critical networks have been private networks because "best-effort" commercial networks have not been deemed resilient enough.

What kinds of vertical industries depend on critical communications?

Private mobile radio (PMR) networks have been used by emergency services, utilities, transport sector such as airports, railways and metros, critical national infrastructure and for site and local area management. Certain PMR functionality such as push-to-talk, group calls etc. have started to migrate to the commercial sector, especially with the advent of more advanced 4G (LTE) networks, but military, public safety, utilities etc. have retained their private solutions, leading to hybrid PMR-LTE solutions emerging.

How does 5G enable critical communications where its predecessor 4G could not do so?

The critical communications community has engaged with global standards body, 3GPP, to develop a mission-critical application layer on top of 4G networks. However, a truly mission-critical solution must be end-to-end with a highly reliable, low-latency end-to-end experience allowing timely delivery of safety-critical data and information. The evolution from 4G to 5G also includes a more flexible, intelligent architecture that can separate out more critical applications from other less time-critical ones.

How will the critical communications capability of 5G open up new business opportunities for many vertical markets?

When we look at applications for smart cities, factories, connected and autonomous vehicles, VR/AR/MR/XR (virtual/augmented/mixed/multiple reality), IoT etc. today, it is perhaps possible to deliver an experience today with 4G, WiFi etc., in a relatively controlled environment with a limited capacity. 5G will deliver guaranteed Quality of Service, security by design, the ability to connect and reconfigure millions of devices. We still cannot imagine all the new business opportunities that will emerge over the coming years, but one thing is certain: the underlying 5G connectivity fabric will need to be critical by design to cater for the most demanding service slices.

How will 5G benefit society?

5G has the potential to change everything. Services can be delivered more efficiently, at lower cost, more reliably and more sustainably to a greater number of people on the planet. The new service architectures, new collaborative business models together with greater automation, virtualisation and network intelligence, will eliminate many of today's frustrating market failures and inefficiencies, generating enormous socioeconomic value, improving the environment and making Governments, businesses and other organisations more accountable. Of course, there are still enormous challenges to be overcome before the full 5G vision can be fulfilled, but the range of interest from all verticals and the coming together of both the critical and commercial communications sectors to work on globally standardised solutions makes me optimistic that we can create a better world.

2.3 Production timeline and onsite filming

A deadline of mid-November was given to the production crew in order to be able to launch the video at ICT 2018 in Vienna in early December 2018.

Onsite filming was done at the 5G Innovation Centre in Surrey, and two speakers were used in the production:

The first speaker used was Peter Clemons, who is a major worldwide evangelist for critical communications and a particularly effective speaker (Figure 1)

Figure 1: Peter Clemons, Expert in Critical Communications

The second speaker was Prof. Rahim Tafazoll, who is the Director of the 5G Innovation Centre and an Expert Witness on 5G in Parliament (for example, he has been called as an expert witness in the matter of Huawei (Figure 2).

Figure 2: Professor Rahim Tafazolli of the 5G Innovation Centre

The production was wrapped up in the first two weeks of November.

Versions were produced both with and without subtitles, in the case that the video would be shown in noisy environments such as trade fairs and exhibitions.

3 Promotional Campaign

3.1 Launch and Promotional Campaign

The video was officially launched at ICT 2018 in Vienna. It was then officially incorporated into the online series of videos within the 5G PPP.

The video is now available within the 5G PPP YouTube Channel at this address:

https://www.youtube.com/watch?v=9Wh09XJzKM8

The duration of the video is approximately two minutes and forty-five seconds.

It has obtained the official 5G PPP branding in its trailer (Figure 3).

Figure 3: 5G PPP Branding of the Video

A future step is featuring the video is the final production, graphically designed publication and promotion of a 5G Roadmap for vertical industries and standardisation. The video is very well suited to such a publication since it highlights the role of critical infrastructures, and albeit indirectly, the special role of SA6 – mission critical applications in 3GPP. The Roadmap will focus mostly on 3GPP and will draw on work within the recently formed Task Force, 3GPP Market Representation Partners (3GPP MRP TF) and its workshop series, as well as relevant activities within the 5G-IA Pre-Standardization Working Group.

4 Conclusions

The Global5G.org video is the only one in the entire collection of 5G PPP videos that is specifically on the topic of critical communications, and specifically within the context of verticals. Its style and content are directed at an intelligent lay audience, without resorting to detailed technical information, and is also suitable for distribution to high-level management and decision-makers in the context of making the case for 5G in vertical sectors.