



## **Swisscom brings the Patrouille des Glaciers 2018 to your living room live**

**When the 21st Patrouille des Glaciers gets underway on 17 April, Swisscom will be ready with innovations. The patrols will now be tracked live with the low-power network and, for the first time, the Patrouille des Glaciers can be seen live via Swisscom TV – all thanks to temporary communication networks set up under the harshest conditions.**

For the first time ever, Swisscom will bring the legendary Patrouille des Glaciers (PDG) to living rooms across Switzerland: The PDG will be broadcast live via Swisscom TV on the Teleclub free TV sports channels Teleclub Zoom and Sports Flash, as well as on Canal9. Another novelty is that Teleclub is working together with a private channel. Teleclub Deputy Sports TV Director and PDG project lead Alain Rohrbach says, “We are looking forward to gripping live coverage of this unique event. In order to provide our viewers with an up-close experience of our voyage across the Alps, we’ll also be taking part with our own patrol.” More than 40 journalists and technicians will be on hand to provide viewers with spectacular images from the mountains. It will also be a feast for the eyes of people who are less interested in sport.

The completely newly developed “Swisscom Patrouille des Glaciers” app will send fans’ hearts aflutter, offering live tracking, live footage, including of the night-time leg from the Rosa Blanche at 3160m, and 360-degree images from along the course. The app is available free of charge from the [App Store](#) and [Play Store](#).

### **The Internet of Things in the mountains**

In 2018, in addition to the tried-and-true mobile telecommunication and company radio networks, there will also be a low-power network (LPN) in operation in the Alpine terrain. The LPN is a dedicated network for the Internet of Things and combines a tremendous reach, energy-saving transmission and a comparatively easy network setup. It now covers 95% of the population. The LPN enables



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patrols to be followed seamlessly using what are known as trackers, for safety reasons and for live tracking on both the Web and the app. The Swisscom Broadcast team has left nothing to chance. Joachim Ernst, the LPN PDG project manager at Swisscom Broadcast, explains: “We deep-froze the trackers in the lab to simulate the extreme weather conditions during the PDG.” All the equipment has to be able to withstand the tough high Alpine conditions. “We were obliged to find and employ trackers that can cope with very low temperatures,” Ernst says. The tests showed that trackers fitted with rechargeable batteries are unsuitable because they lose power too quickly.

### **Network construction under extreme conditions**

It's hardly surprising that the Patrouille des Glaciers is known as the world's toughest ski tour race. Participants spend months preparing for it and need enormous stamina and discipline. This also applies to everyone else who takes part, especially the employees of Swisscom, which has set up its own temporary 2G and 4G networks in the most unappealing high Alpine conditions at 3000 metres about sea level, networks for both its company radio and, as a complete novelty, a network for the Alpine Internet of Things.

In all, more than three tonnes of equipment – base stations, antennas, repeaters and other telecom equipment – will be transported up into the mountains. Reto Näf, the Swisscom employee responsible for network construction at the PDG high posts, says: “The thin air is physically demanding, while climbing up icy antenna masts is challenging. Snow, cold and damp all affect the sensitive equipment. To secure the antennas, we have to shovel through metres of snow.” During the race, another 30 Swisscom specialists at the technical headquarters in Sitten work around the clock to ensure everyone's safety. But not everything can be planned for. In 2016, a Swisscom employee was forced to remain at his high Alpine technical post for a week after the end of the PDG for meteorological reasons.

Berne, 9 April 2018



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### **Interactive map of the PDG, including live tracking for online portals**



The interactive map will be available free of charge for use and embedding together with the credit “PDG/Swisscom”. The map will be expanded continuously during the race. The tracking data will be updated every two minutes while the race is underway.

Embedded Deutsch: `<iframe src="https://pdg.swisscom.ch/map.html?lang=de" width="800" height="500" />`

If you have any questions, please contact [mediendienst@swisscom.com](mailto:mediendienst@swisscom.com)

### **Live on Swisscom TV**

From 7.30 a.m. to midday on 21 April on Teleclub Zoom (German-speaking Switzerland), Sports Flash (French-speaking Switzerland and Ticino) and Canal9.

### **“Swisscom PATROUILLE DES GLACIERS” app for Android and iOS**

Live tracking of all patrols, a live cam from the Rosa Blanche, 360-degree images along the route, participants and much else besides.

[AppStore](#)

[Google Play](#)

**Facts and figures:**

- Three metric tons of telecoms materials such as base stations, antennas, repeaters and other telecommunications equipment are transported to altitudes as high as 3650m.
- Temporary 2G and 4G networks for emergency calls by participants, TV streaming and general mobile phone cover for everyone involved: six base stations and three repeaters. The highest location is at Tête Blanche.
- A company radio network for emergency crews: a 100% available digital radio system comprising 14 base stations at seven locations form a modular voice network that optimally suits the network topology and mobile telephony coverage in high Alpine regions. The system will be supplied via a directional beam link from the Armed Forces Command Support Organisation (AFCSO).
- The LPN for live transmission of the patrols' positions: temporary support from the public LPN on the course between Zermatt and Verbier: 25 gateways and 900 trackers are in use
- Participation by 1600 three-person patrols from Switzerland and abroad, 19% of participants are female, the remaining 81% male. 500 patrols are military, 1100 civilian. The youngest participant is 18 years old, the oldest 74.
- Route Z: From Zermatt to Verbier, 53km long, 110km effective distance, 3394m elevation gain, 4090m elevation loss
- Route A: From Arolla to Verbier, 26km long, 53km effective distance, 1914m elevation gain, 2374m elevation loss

**The legendary PDG**

The Patrouille des Glaciers is organised by the Federal Department of Defence, Population and Sport (DDPS) and takes place every two years. Swisscom has been providing innovative solutions for the safety of everyone involved – participants and spectators alike – since 2004, ensuring that the event can be followed live on television, online and on an app for the first time this year. The PDG was created during the Second World War to test the stamina and resilience of soldiers. It



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was banned in 1949 after a tragic accident which left three people dead. Nevertheless, the legend lived on, and the race was restarted in 1984 under the strictest possible safety precautions.

[www.pdg.ch](http://www.pdg.ch)