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| WORLD METEOROLOGICAL ORGANIZATION  COMMISSION FOR BASIC SYSTEMS  -----------------------------  FIRST MEETING OF  INTER-PROGRAMME EXPERT TEAM ON CODES MAINTENANCE  GENEVA, SWITZERLAND, 24 - 28 JULY 2017 |  | IPET-CM-I / Doc. 2.5 (2) Rev1  (13. 6. 2017)  -------------------------  ITEM 2.5  ENGLISH ONLY |

Common Code tables to binary and alphanumeric codes

**New Common Code Table entries for Spire Global, Inc.**

*Submitted by* *J. Ator (USA)*

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**Summary and Purpose of Document**

This document proposes new C-1, C-5, C-8 and C-11 entries for use by Spire Global, Inc.

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**ACTION PROPOSED**

The meeting is requested to approve the contents for implementation within the November 2017 fast-track (FT2017-2) update to the WMO Manual on Codes.

**DISCUSSION**

Spire Global, Inc. (<https://spire.com>), a U.S. corporation operating a fleet of nanosatellites for commercial purposes, will be participating in a pilot demonstration program to provide radio occultation data to NOAA for evaluation. The data will be reported using the standard BUFR sequence descriptor 3-10-026, but during the evaluation period currently scheduled to begin in November 2017, the data will only be available for non-operational use (e.g. research, verification) in delayed mode of at least 24 hours, rather than in real-time. Other non-commercial organizations including other global NWP centers may also be granted access to this data in delayed mode through NOAA, upon request. Following the conclusion of the evaluation period in mid-2018, it is hoped that positive value will be gleaned from the data and contractual arrangements made so that the data can eventually be made available in real-time for operational use by allowed centers.

The Spire fleet consists of 40+ different nanosatellites which will likely increase in the future, and there will be up to 4 different receiver configurations at any given point in time which can be described as shown in the proposal below. The proposed entries have been reviewed and approved by the CGMS Task Team on Satellite Data, and they were subsequently forwarded via email to the full IPET-CM for initial review and discussion in mid-April 2017. So at this point, we respectfully request approval for inclusion within the November 2017 (FT2017-2) fast-track update to the WMO Manual on Codes.

**PROPOSAL**

**Add new entry to Common Code Tables C-1 and C-11:**

178 Spire Global, Inc.

**Add new entry to Common Code Table C-5:**

840 Spire Lemur 3U CubeSat

**Add new entries to Common Code Table C-8:**

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| **Entry #** | **Agency** | **Type** | **Instrument short name** | **Instrument long name** |
| 530 | Spire | GNSS occultation sounder | SGNOS-A | Spire global navigation satellite system occultation sounder A |
| 531 | Spire | GNSS occultation sounder | SGNOS-B | Spire global navigation satellite system occultation sounder B |
| 532 | Spire | GNSS occultation sounder | SGNOS-C | Spire global navigation satellite system occultation sounder C |
| 533 | Spire | GNSS occultation sounder | SGNOS-D | Spire global navigation satellite system occultation sounder D |