

## Unregistered Satellites - Table of Categories (v2.0)

Table 1: Reasons for lack of registration (Launches to end of 2016, as of Dec 2017)

Case	Description	#Sats	Total
A	<b>Considered out of scope by launching state:</b>		87
AA	US satellites reentered prior to Res.1721B (Early USSR satellites were retroactively registered)	32	
AB	Instrument packages or subsatellites not considered as full payloads	43	
AC	Payloads that failed to separate from another payload, or from a rocket stage belonging to another state	1	
AD	Payloads in orbit aboard another vehicle (e.g. ISS), awaiting future deployment	11	
B	<b>Probable deliberate omission:</b>		20
BA	Soviet unacknowledged planetary launch failures in Earth orbit.	6	
BB	Soviet space weapons tests (1966)	2	
BC	Shanghai-built payloads omitted from Chinese retrospective registration	6	
BD	Rumoured highly secret US satellite deliberately uncataloged (PROWLER 1990-097E) (Molczan T, <a href="http://www.satobs.org/prowler.html">http://www.satobs.org/prowler.html</a> )	1	
BE	Chinese military satellite (Kuaizhou-1,2)	2	
BF	US classified maneuvering spacecraft deliberately cataloged as debris (2012-048P, 2015-058R) and not registered. 4 others in same series registered, but only as debris.	2	
BG	South African military satellite supplied by Russia (Kondor-E)	1	
C	<b>Accidental omission:</b>		140
CA	Satellites failed soon after launch, overlooked by launching state	6	
CB	Deep space objects overlooked (US, Japan, ESA)	10	
CC	Omitted/lost Soviet registration document (Jul-Aug 1970)	11	
CD	US satellite launched on foreign rocket, omitted in error (Iridium 33, Lemur-2)	5	
CE	NATO satellites omitted in error - 6 of 8 were registered by US, 2 not	2	
CF	US military satellites omitted in error? (1983-60C, Nova 2, ODERACS 2F, ORSES)	4	
CG	Short-lived satellites omitted in error (STS-44, SEDS-1, STS-66)	3	
CH	Chinese small satellites (NX1, BX-1, ZP, FN, XY, TT-1 and others)	31	
CJ	Chinese large satellites omitted in error (Zhongwei-1, SJ8, Shenzhou 9, 10, ABS 2/2A, GF3)	7	
CK	US satellite launched on Sea Launch, omitted in error (Telstar 18)	1	
CL	Miscellaneous satellites omitted in error for unknown reasons US (Nanosail-D2, Fastrac-2, ArduSat 2, Kicksat, TES-4, FLock-1e/2b), Germany (AMSAT OSCAR 13), Saudi Arabia (Badr 4), South Korea (OSSI), UAPSAT (Peru), Tita (Argentina), Nanosat-C-Br, AESP-14, SERPENS (Brazil), ANTELSAT (Uruguay), Telstar 12V (Canada), Sky Mexico 1 (Mexico), GOMX3 (Denmark), GSAT-6, Sathta, Swayam, Insat-3DR (India), Kinschachi-2 (Japan), Spain (Spainsat), Turkey (ITUpSat-1, GokTurk-2), Indonesia (Palapa D, BRISAT)	33	
CM	US forgot to register all Sep and Dec 2013 launches	21	
CN	ESA forgot to register all 2011-2012 launches	6	

(continued)

Table 2.1 (continued)

Case	Description	#Sats	Total
D	<b>Turf wars:</b>		76
DA	IGO (INTELSAT and INMARSAT) satellites ignored by US and UK.	42	
DB	lost in transition between 2 IGOs (Meteosat-6, ESA/EUMETSAT)	1	
DC	lost in Hong Kong transition between UK and China (Asiasat 3)	1	
DD	Joint ownership by multiple government space agencies (SARAL, GPM-C)	2	
DE	globalization confusion (LMI-1 owned by Lockheed subsids in US, UK; Latinsat owned by US company and not its Argentine subsidiary; Lambdasat really US but associated with Greece; MBSAT jointly owned by Japanese and S Korean companies; Protostar, SES-3, IS-23)	11	
DF	remained property of manufacturer after launch failure? (BSAT-2b, Arabsat 4A, Telkom 3)	3	
DG	New Skies satellites ownership transfer from US to Netherlands upon successful launch by France.	2	
DH	European Union satellites (Galileo) with ESA as technical agent, but not registered by ESA or any other entity	14	
E	<b>Non participation in convention:</b>		66
EA	Launched after Res. 1721B but prior to state beginning registrations	21	
EB	State has not registred any of its satellites (Taiwan, Vietnam, Singapore, Iran, Mauritius, Switzerland, Portugal, Morocco, Columbia, Romania, Ecuador, Estonia, Monaco, Laos).	45	
F	<b>Intermittent participation - no known reason for omission:</b>		17
FA	Italy 7, Canada 1, Netherlands 4, Brazil 2 (Dove-1, SCD-2), Argentina 2 (Pehuensat, LO-74), Israel 1 (Ofeq-2)	17	
G	<b>Dilatory registration - no recent submission from launching state:</b>		63
GA	Israel - last sub in 1995 (registered 2 sats in 1998 and 1995, no others)	15	
	Malaysia - last sub in 2005	1	
	Egypt - last sub in 2008	2	
	Saudi Arabia - last sub in 2009	6	
	Thailand - last sub in 2009	2	
	Spain - last sub in 2010	8	
	Kazakhstan - last sub in 2011	3	
	Luxembourg - last sub in 2014	1	
	Ukraine - last sub in 2013	1	
	Turkey - last sub in 2015	1	
	Australia - last sub in 2015	2	
	China - last sub in 2016 (data to Aug 2016)	21	