

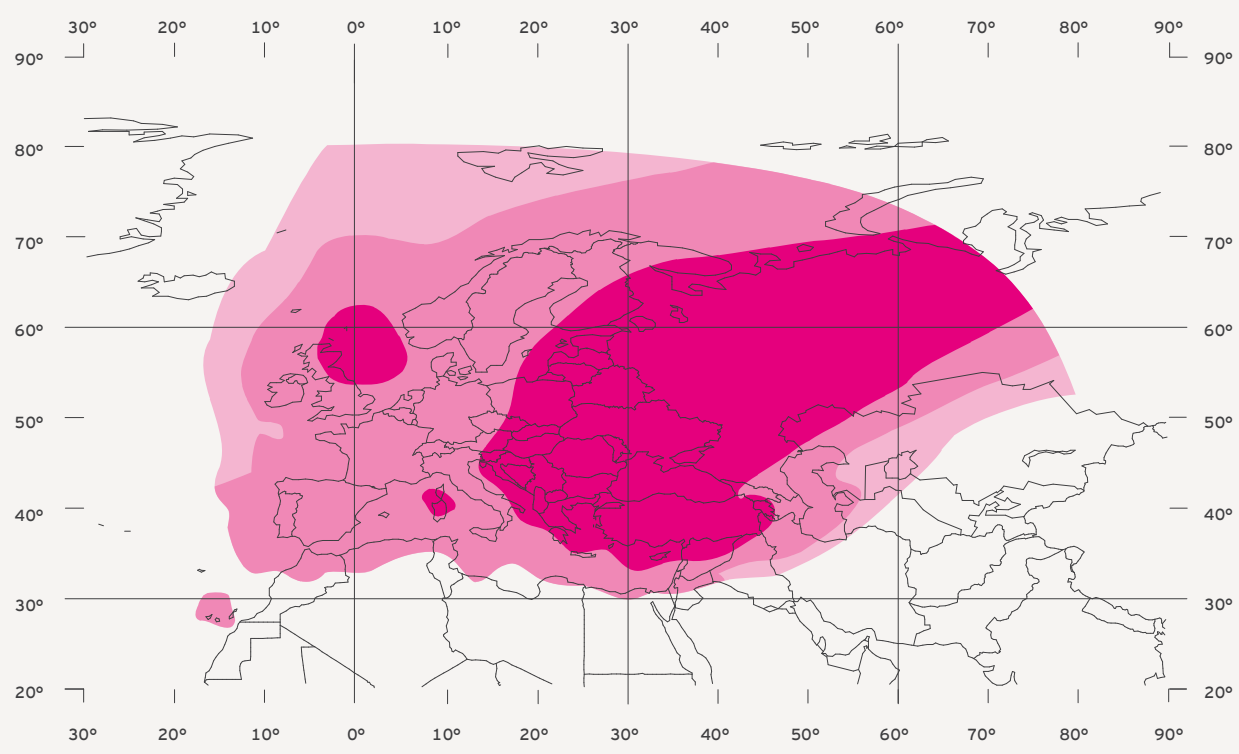
ASTRA 4A

TV Program – DW (Deutsch)

Rebroadcasting and Direct-to-Home

Launch date
August 1, 2015

Position	4,8° East
Transponder	4.235
Frequency	12,380 GHz
Polarization	horizontal
FEC	3/4
Symbolrate	27,500 Msymbols/s
Modulation	QPSK /DVB-S
Video Standard	PAL
Video Compression	MPEG-2
Audio Compression	MPEG-1/Layer 2
Encryption	-
Additional Data Services	EIT / EPG
TV Channel	DW (Deutsch)
Radio Channel	-



Reception may be possible even beyond these contours

1.2 m	1.8 m	2.4 m	Diameter of satellite receiving antenna in meter (approximate values) for Rebroadcasting
0.8 m	1.2 m	1.8 m	
			Diameter of satellite receiving antenna in meter (approximate values) for Direct-to-Home

Important technical remark:
The diameters of the antennas are calculated for perfect weather conditions (clear sky), assuming perfectly aligned high quality antennas. Commonly used wire mesh antennas have a lower efficiency than solid dishes. To secure the reception, it is advisable to generally choose a diameter about 20% larger.