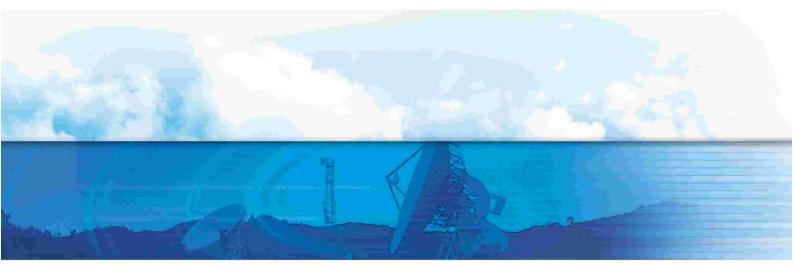
# Bridging the World





### Contact Information

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## Iris Gateway Satellite Services

Established in 1999, Iris is a wholly owned subsidiary of CYTA, the main provider of telecommunication services in Cyprus. The company provides turnaround services from its facilities in Cyprus, offering high quality links between Europe and Asia.

By building on the strengths of its competent personnel and modern facilities, Iris remains committed to quality and offers premium services to its customers at competitive prices.

### Services

Iris offers an extensive range of satellite services and associated products including Digital Platforms on selected satellites, Satellite Turnaround Services covering diverse areas around the globe, and associated Fibre Connectivity Products. These services are made available on both a permanent and occasional basis.

### Digital Platforms

Iris offers Digital Platforms via satellite, reaching wide audiences in Europe, Asia and Australia. These Platforms utilise DVB technology to offer Video, Audio and Data services for direct-to-home reception and contribution links. For Europe, the services are offered through Sirius 2 satellite in association with SES Americom. For Asia and Australia the services are offered through AsiaSat 2 in association with AsiaSat.

### Other Satellite Turnaround Services

Iris is utilising a large farm of receive antennas at its earth station site enabling the reception of a number of selected services from a multitude of satellites covering the Eastern Mediterranean. Services are processed as needed and subsequently uplinked to the satellite chosen by the customer to reach the intended destination area. Contribution links are also available for distribution at locations specified by the customers. Links of this type are also offered by Iris via Fibre Connectivity Products serving major international destinations.

### Occasional Services

Occasional services are primarily offered for video transmission and turnaround of special events, provided via Digital Platforms covering Europe, Asia and Australia. Alternatively, such services are offered using specific links to major satellites, which are capable of reaching a wide range of international destinations. Occasional services are provided in digital and analogue formats in both C-band and Ku-band in accordance with the customer needs.

### Fibre Connectivity Products

The International Commercial Services Division of CYTA, CytaGlobal, offers services in the international market and has an extensive cooperation with Iris. Recognising the need to address diverse customer needs, Iris is utilising the international fibre network of CytaGlobal to complement its satellite offering. These products provide integrated solutions to customers interested in delivering or receiving their services via fibre.

Apart from its facilities in Cyprus, Iris can accept or deliver customer services at Telehouses in London and Athens via fibre optic links in association with CytaGlobal. Services to other major international destinations are also offered in collaboration with local providers.

### Earth Station Site and Technical Capabilities

Iris's facilities are situated at Makarios satellite earth station in Cyprus. The teleport site is ideal for the provision of satellite services as it combines mild climatic conditions with a privileged geographical location. It provides optimum visibility of the geostationary arc and suitable antennas can reach numerous satellites with coverage ranging from the Americas to Australia.

The site is home to a large farm of earth station antennas operating with a wide range of satellites from most major operators. A multitude of satellite links are provided in C, Ku and DBS frequency bands. The Facility is also supported by CytaGlobal's telecommunications infrastructure, which is among the most developed in Europe and includes Frame Relay, ATM and IP broadband connections to the local and international fibre network.

Makarios satellite earth station is manned 24 hours a day, 365 days a year by competent personnel, qualified for the provision of satellite services and with extensive experience in satellite communications. The satellite antennas and associated equipment utilized at the station have been supplied by reputable companies with extensive experience in the provision and installation of earth station systems. A wide range of satellite services are offered from this location including the full set of services offered by Iris.

### Fibre Optic Network

Iris facilities in Cyprus are well connected to CytaGlobal's international network through diverse fibre links. This network links Cyprus to the rest of the world with several submarine fibre optic cable systems reaching diverse international nodes.

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Direct connectivity is offered through bilateral connections to neighbouring countries such as Greece, Syria, Lebanon

and Israel. Regional systems provide links with additional destinations in the Mediterranean and Black Sea reaching countries like Italy, France and Russia. Additional connectivity to major destinations in Europe, Asia and the Americas is provided with major international cable systems, such as SEA ME WE 3, MedNautilus and TAT-14.

18) Iris is also using CytaGlobal's modern fibre IP-MPLS network, which integrates voice, data and video into one managed Global Network. The high-speed IP-MPLS Network is secure, flexible and scalable. It has three major access nodes in Cyprus, the UK and Greece and with the co-operation of other service providers can offer IP-MPLS services to diverse international destinations. The portfolio of IP-MPLS services provided include IP Transit, MPLS-VPN, MPLS Class of Service, Voice over IP and A a /Frame Relay.

# Iris Digital Platform on AsiaSat 2

Iris provides an MPEG-2/DVB Digital platform via the AsiaSat 2 satellite in association with AsiaSat. AsiaSat 2 is located at 100,5Æ East and its coverage extends from the Middle East to Asia and Australia. Its prime orbital location and extended coverage have established AsiaSat 2 as one of the most popular satellites in the region.

Iris's Digital Platform is located at Makarios earth station in Cyprus, which

has become a privileged gateway for feeding services to AsiaSat 2 from Europe and the Middle East. The main services offered through the Platform include digital television, radio programs and data services. Iris has already been chosen by major Middle East broadcasters for the distribution of their programs via AsiaSat 2. The services are tailored in accordance with the customer needs and are suitable for Direct

2. The services are tailored in accordance with the customer needs and are suitable for Direct to Home (DTH) reception, distribution to Cable Head-Ends, and point-to-point contribution links.

Iris has the capability of receiving customer services through one of the numerous antennas located at Makarios earth station or, if preferable, through the extended fibre optic network of CytaGlobal.

The signals are processed and multiplexed onsite for uplinking to AsiaSat 2. The Digital Platform is fully DVB compliant and suitable for reception with a wide range of digital receivers.

Monitoring of the Digital Platform is performed on a full time basis by experienced personnel capable of dealing with any situation that may arise. Each service is monitored separately using the appropriate equipment to ensure high quality service to the customers.

### Technical Characteristics of the Service

Satellite: AsiaSat 2 @ 100,5ÆEast

Transponder Number: 1A Downlink EIRP: 39 dBW typical

Dish Size required: 2 m

Transponder Frequency: 3.660 GHz

Polarisation: Vertical Bandwidth: 36 MHz

Symbol Rate: 27.5 MSymbols MPEG-2/DVB-S

Modulation: QPSK

Error Correction: 3/4 FEC and 204/188 Reed-Solomon coding

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C-band Coverage

Ku-band Coverage

# Iris Digital Platform on Sirius 2

Iris provides an MPEG-2/DVB Digital Platform via Sirius 2 high-powered BSS satellite in association with SES Americom. Located at 5Æ East, Sirius 2 is a powerful satellite providing extended coverage of Europe and the surrounding areas, including parts of Northern Africa and the Middle East. A satellite dish of approximately 0,65 m is all that is needed for clear reception of the Digital Platform, even at the edges of the coverage zone.

The geographical location of Cyprus and the pan-European coverage of Sirius 2, is an ideal combination for the provision of turnaround services through the Digital Platform. The principal services offered through the Platform are primarily digital television programs, with audio and data services. The services are tailored in accordance to the customer needs and are suitable for Direct to Home (DTH) reception, distribution to Cable Head-Ends, and point-to-point contribution links.

Customer services can be readily received via satellite at Iris facilities at Makarios earth station in Cyprus, or delivered to

site with international fibre links. The signals are processed and multiplexed on site for uplinking to Sirius 2. The Digital Platform is fully DVB compliant and suitable for reception with a wide range of digital receivers.

Monitoring of the Digital Platform is performed on a full time basis by experienced personnel capable of dealing with any situation that may arise. Each service is monitored separately using the appropriate equipment to ensure high quality service to the customers.

### Technical Characteristics of the Service

Satellite: Sirius 2 @ 5Æ East Transponder Number: 33

Downlink EIRP: 50 dBW typical around Europe

Dish Size required: 60 - 70 cm Transponder Frequency: 12.341 GHz Polarization: Horizontal Bandwidth: 33 MHz

Symbol Rate: 27.5 MSymbols MPEG-2/DVB-S

Modulation: QPSK

Error Correction: 3/4 FEC and 204/188 Reed-Solomon

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