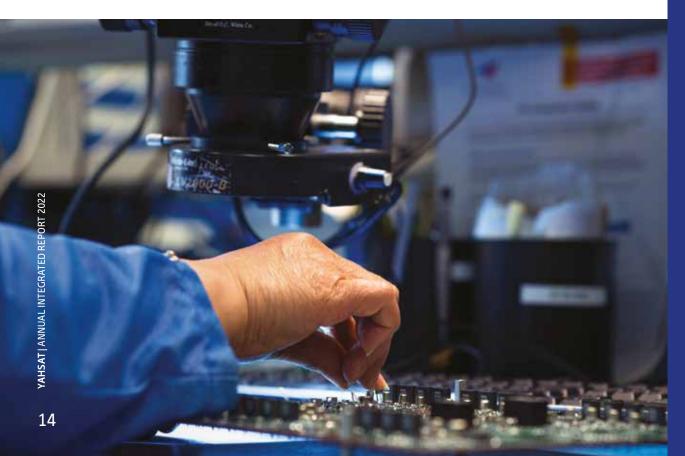
# Market overview A year of accelerating transformation

2022 was another year of continued transformation for the satellite services industry, with substantial investments, the emergence of new challenger business models, further industry consolidation and growing demand for connectivity across all segments and geographies as satellite coverage, capabilities and pricing improve.





## Large and Growing Market Opportunities

- With a global space race underway, the overall space economy continues to grow into the hundreds of billions of US dollars<sup>1</sup> in private and public annual expenditures within the industry – we see this growth trend continuing well into this decade and beyond.
- Government and Military sub-segment expected to grow at mid-single digit rate over the next ten years<sup>1</sup>.
- Space data traffic is expected to increase multiple fold by the end of the decade<sup>2</sup>.
- Fixed Satellite Services (FSS) revenues are forecast to grow at mid-single digit rate over the next ten years<sup>2</sup>.
- Mobile Satellite Services (MSS) revenues are forecast to grow at low single digit rate over the next ten years<sup>2</sup>.

- 1 Euroconsult Annual Space Economy Report.
- 2 NSR (Northern Sky Research).

#### Key Satellite Industry Trends and our response to them

#### **Ubiquitous data**

- Increasing global data connectivity needs.
- Higher demand for MSS (mainly within vessels and planes).
- Internet of Things (IoT) and Direct-to-Device (D2D) technology gaining traction, increasing demand for narrowband satellite communication.
- Continuing decline in broadcast as demand shifts from linear to over-the-top (OTT) media services.

#### How Yahsat is responding

- Yahsat is growing its FSS business across
   Africa and the Middle East. We continue to
   competitively structure and price our offerings
   in response to specific market demands of our
   service providers (for onward sale to end users)
   as well as value added resellers.
- Yahsat is uniquely positioned to capture market share in the MSS subsegment.
   Thuraya's expertise and assets, including the forthcoming launch of the T4-NGS satellite and valuable narrowband spectrum rights, allow it to offer new products and play an important role in the evolving IoT and D2D space. The T4-NGS satellite will allow us to develop more than a dozen new applications for use across industry verticals. In 2022, we also invested in an IoT device and platform developer, to capitalize on high growth opportunities for low power, low data rate satellite-enabled sensing and tracking services.
- In response to increased use of LEO constellations for both MSS and FSS services, we are currently exploring opportunities to partner strategically and/or invest in other constellations to strengthen our offerings and leverage our unique mobility assets, experience and client portfolio.

### Space back on national agendas

- Governments increasing defence budgets and satellite communications expenditure.
- Expanded coverage ambitions and bridging the digital divide.
- Increased government collaboration with private sector to enhance satellite communication capabilities, which have emerged as a key tactical element in conflict zones.

#### How Yahsat is responding

- Yahsat is developing ambitious programs to enhance and reinforce its core government business with several new FSS and MSS products dedicated to the government and defence sectors.
- This includes the launch of a new MSS satellite currently under construction, T4-NGS, as well as two new potential FSS satellites, Al Yah 4 and Al Yah 5, which will ultimately replace Al Yah 1 and Al Yah 2, and serve the UAE Government's satellite communication needs.
- Yahsat is exploring adjacent satellite services, aiming to become a one-stop-shop for the UAE Government and other Government entities for all satellite services, taking into account the renewed interest in the Space sector and the recent launch of the US\$ 800 million UAE Space Fund.
- Yahsat is committed to developing a joint program with Tawazun for the establishment of facilities in the UAE to manufacture satellite communications terminals and achieve vertical integration across the value chain.

#### Technological acceleration

- Technological evolution improving satellite economics, reducing overall capital expenditure requirements.
- Next generation satellites with more flexibility and reconfigurability.
- Increased traction in Direct-To-Device (D2D) technology to enable satellite communication on consumer handheld device.

#### How Yahsat is responding

- Yahsat is closely monitoring the many technological developments taking place in the sector, and maintaining an open dialogue with key innovators to explore potential partnerships and joint offerings.
- We are currently constructing our latest MSS satellite, T4-NGS, which will spur growth across many industry verticals, offering a wide range of unique features including higher speeds, more than double the capacity of Thuraya 2 and Thuraya 3 satellites within our fleet, an enlarged coverage area, higher security and flexible performance.
- Two new potential satellites, Al Yah 4 and Al Yah 5, will offer enhanced FSS services at more competitive pricing compared to the cost of the original procurement programme of Al Yah 1 and Al Yah 2 which they will ultimately replace.
- Yahsat is currently exploring potential opportunities in D2D and other growth areas, leveraging its experience in MSS and its spectrum assets.
- Yahsat has recently signed a partnership with Hub71 to advance technological innovations that support the development of the UAE's mobile satellite capabilities. The first contract resulting from the new partnership is an agreement between Yahsat and Hub71-based start-up, Mental VR, a Virtual Reality (VR) software development company.

#### Shifting business landscape

- New applications and use-cases enabled: enterprise, tele-medicine, virtual education, etc.
- Consolidation and collaboration between industry players, both horizontally and vertically.
- New challenger business models emerging, including adoption of a hybrid constellation approach.
- Growing interest and capital directed towards space sector (record investment in 2022).

#### How Yahsat is responding

- Yahsat is developing new initiatives that capitalise on the new business models observed with the objective to test them on the ground from early 2023 including a new community Wi-Fi programme for the African market.
- Yahsat keeps capitalising on the highly attractive local ecosystem of start-ups and incubators (including Hub71) to explore new use-cases levering new technologies such as Al and Virtual Reality.
- We strongly support cross-collaboration with space and tech sectors companies.
   Yahsat is currently discussing with several players for join initiatives that should bring competitive advantage and improve company's positioning on the market.