

Document UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 6-K Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934 For the month of June 2025 Commission File Number: 001-35135 Sequans Communications S.A. (Translation of Registrant's name into English) 15-55 boulevard Charles de Gaulle 92700 Colombes, France Telephone: +33 1 70 72 16 00 (Address of Principal Executive Office) Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F: Form 20-F ☐ Form 40-F ☐ Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): Yes ☐ No ☐ Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders. Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): Yes ☐ No ☐ Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR. A The information in this report furnished on Form 6-K shall be incorporated by reference into each of the following Registration Statements under the Securities Act of 1933, as amended, of the registrant: Form S-8 (File Nos. 333-187611, 333-194903, 333-203539, 333-211011, 333-214444, 333-215911, 333-219430, 333-226458, 333-233473, 333-239968, 333-259914 and 333-266481) and Form F-3 (File Nos. 333-255865 and 333-271884). EXPLANATORY NOTE Issuance of Equity and Convertible Debt in Private Placements Entry Into Material Definitive Agreements On June 22, 2025, Sequans Communications S.A. (the "Company") entered into a Securities Purchase Agreement (the "Equity Purchase Agreement") with certain institutional and accredited investors (the "Equity Purchasers"), pursuant to which the Company has agreed to issue to the Equity Purchasers in a private placement (the "Equity Private Placement") an aggregate of (a) (i) 1,139,263,490 ordinary shares, nominal value of 0.01 per share, of the Company (the "Ordinary Shares"), represented by 113,926,349 American Depositary Shares (the "ADSs") and (ii) pre-funded warrants (the "Pre-Funded Warrants") to purchase up to an aggregate of 253,593,650 Ordinary Shares (the "Pre-Funded Warrant Shares") represented by ADSs and (b) warrants (the "Warrants") to purchase up to an aggregate of 208,928,460 Ordinary Shares (the "Warrant Shares") represented by ADSs or Pre-Funded Warrants in lieu thereof at the option of the holder of the Warrant, at a combined purchase price of \$1.40 per ADS and Warrant, the equivalent of \$0.14 per Ordinary Share and Warrant at the current ratio, or \$1.39 per Pre-Funded Warrant and Warrant. In addition, on June 22, 2025, the Company also entered into a Secured Convertible Debenture Purchase Agreement (the "Debenture Purchase Agreement") and, together with the Equity Purchase Agreement, the "Purchase Agreements") with certain institutional and accredited investors (the "Debenture Purchasers"), pursuant to which the Company has agreed to issue to the Debenture Purchasers in a private placement (the "Debenture Private Placement") and, together with the Equity Private Placement, the "Private Placements") (a) secured convertible debentures (the "Secured Convertible Debentures") in the aggregate principal amount of \$189 million and (b) Warrants to purchase up to an aggregate of 202,499,980 Warrant Shares. The Private Placements will be carried out, without shareholders' preferential subscription rights, through reserved offerings to specific categories of investors, pursuant to the fifteenth resolution of the Company's combined general meeting of shareholders to be held on June 30, 2025 (the "Shareholder Approval") and in accordance with Article L. 225-138 of the French Commercial Code. The Pre-Funded Warrants are exercisable commencing upon issuance thereof at Closing (as defined below) through the lifetime of the Company at a nominal exercise price of 0.01 per Pre-Funded Warrant Share, subject to adjustment as provided therein. The Warrants are exercisable commencing upon issuance thereof at Closing for a period of 90 days and may be exercised for (i) Warrant Shares, at an exercise price equal to \$1.40 for each Warrant or (ii) Pre-Funded Warrants, at an exercise price equal to \$1.40 minus 0.01 for each Warrant. A holder (together with its affiliates) may not exercise or convert, as applicable, any portion of the Pre-Funded Warrants, the Warrants or the Secured Convertible Debentures to the extent that the holder would own more than 4.99% (or, solely with respect to the Pre-Funded Warrants and the Warrants, at the holder's option upon issuance, 9.99%) of the Company's outstanding Ordinary Shares immediately after exercise or conversion, as applicable. However, upon at least 61 days prior notice from the holder to the Company, a holder with a 4.99% ownership blocker may increase the amount of ownership of outstanding Ordinary Shares after exercising or converting, as applicable, the holder's Pre-Funded Warrants, Warrants or Secured Convertible Debentures, as applicable, up to 9.99% of the number of the Company's Ordinary Shares outstanding immediately after giving effect to the exercise or conversion, as applicable, as such percentage ownership is determined in accordance with the terms of the Pre-Funded Warrant, the Warrant or the Secured Convertible Debenture, as applicable. The Secured Convertible Debentures are convertible into (i) Ordinary Shares (the "Conversion Shares") or (ii) Pre-Funded Warrants at the option of a Debenture Purchaser at any time at a conversion price of \$2.10 per ADS, subject to adjustment as provided therein. (a) From and after the first anniversary date of the date the Secured Convertible Debentures are issued at Closing (the "Issuance Date") until, but not including, the second anniversary date of the Issuance Date, interest shall accrue on the outstanding principal balance of the Secured Convertible Debentures at an annual rate equal to 6.0%, and (b) from and after the second anniversary date of the Issuance Date, interest shall accrue on the outstanding principal balance of the Secured Convertible Debentures at an annual rate equal to 8.0%.

1 The categories of investors include (i) industrial partners that have a similar, complementary or related business to that of the Company; or (ii) institutional or strategic investors that: (A) have, as the case may be, the status of either (i) an accredited investor as defined in Rule 501 of Regulation D of the Securities Act, (ii) a qualified institutional buyer as defined in Rule 144A under the Securities Act or (iii) a qualified investor within the meaning of Regulation (EU) 2017/1129 of 14 June 2017 or an equivalent status under the rules applicable in its country of incorporation; and (B) have a significant track record of regularly investing in companies with high growth potential which includes investments in small/mid cap equities. The maturity date of the Secured Convertible Debentures will be the date that is the first business day on or after 36 months from the Issuance Date. (a) Beginning on and including the 12-month anniversary of the Issuance Date, in the event that the market price of Company's ADSs equals or exceeds 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) out of any 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which the Company provides a redemption notice to the

holder of the Secured Convertible Debentures (and provided that certain equity conditions are satisfied on each trading day of such 30 consecutive trading day period), or (b) beginning on and including the 16-month anniversary of the Issuance Date, in the event that the market price of Company's ADSs has been equal to or less than 40% of the conversion price then in effect for the 10 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which the Company provides a redemption notice to the holder of the Secured Convertible Debentures, the Company shall have the right, but not the obligation, to redeem the Secured Convertible Debentures, (x) in the case of an optional redemption pursuant to clause (a), at an amount equal to the outstanding principal balance being redeemed by the Company, plus all accrued and unpaid interest in respect of such principal balance to, but not including, the date of redemption, plus a payment premium in respect of such principal balance and accrued and unpaid interest equal to (i) 3.0% for payments made within 12 months of the date of the Secured Convertible Debentures and (ii) 5.0% for payments made from and after 12 months of the date of the Secured Convertible Debentures (the "Payment Premium"), and (y) in the case of an optional redemption pursuant to clause (b), at an amount equal to the sum of (A) the product of (i) the outstanding principal balance being redeemed by the Company multiplied by (ii) 108% plus (B) the Payment Premium with respect to all accrued and unpaid interest in respect of such principal balance to, but not including, such date of redemption. A Debenture Purchaser shall have the right to elect to convert all or any portion of the outstanding principal balance being redeemed by the Company (and accrued and unpaid interest thereon) until the business day immediately preceding the applicable date of redemption. A Debenture Purchaser also has the right to require the Company to repurchase for cash all or any portion of the principal of such Debenture Purchaser's Secured Convertible Debenture in the event of a Fundamental Change (as defined in the Secured Convertible Debentures) at a repurchase price equal to the outstanding principal balance to be so repurchased, plus all accrued and unpaid interest thereunder as of the date of such repurchase, plus the Payment Premium in respect of such principal balance and accrued and unpaid interest. The Private Placements are expected to close (the "Closing") simultaneously on or around July 1, 2025, subject to the Shareholder Approval and customary closing conditions. The aggregate gross proceeds from the Private Placements are expected to be approximately \$384 million. The Company intends to use the net proceeds from the Private Placements for the purchase of the Digital Asset commonly referred to as "Bitcoin" (BTC) in the cryptocurrency marketplace ("Bitcoin") and for general corporate purposes associated with purchasing Bitcoin, subject to the security and collateral requirements of the Debenture Private Placement. The Private Placements are exempt from registration pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"). Pursuant to the terms of the Purchase Agreements, the Company also agreed to enter into registration rights agreements with the Equity Purchasers (the "Equity Registration Rights Agreement") and the Debenture Purchasers (the "Debenture Registration Rights Agreement"), respectively, pursuant to which the Company shall file registration statements to register the resale of the Ordinary Shares, ADSs, Pre-Funded Warrant Shares, Warrant Shares, and Conversion Shares, as applicable, within 15 days and seven business days, respectively, of Closing. In connection with the Debenture Private Placement, the Company also agreed to forms of documents to be executed upon the occurrence of certain events contemplated under the Debenture Purchase Agreement, including but not limited to, a guaranty and security agreement (the "Security Agreement"). Pursuant to the Security Agreement, all obligations of the Company under the Secured Convertible Debentures will be secured by security interests in certain property of the Company and certain subsidiaries of the Company. The foregoing descriptions of the Equity Purchase Agreement, Debenture Purchase Agreement, Pre-Funded Warrant, Warrant, Secured Convertible Debentures, Equity Registration Rights Agreement, Debenture Registration Rights Agreement and Security Agreement do not purport to be complete and are subject to, and are qualified in their entirety by reference to, the full text of the forms of Equity Purchase Agreement, Debenture Purchase Agreement, Pre-Funded Warrant, Warrant, Secured Convertible Debentures, Equity Registration Rights Agreement, Debenture Registration Rights Agreement and Security Agreement, which will be filed as Exhibits 10.1, 10.2, 4.1, 4.2, 4.3, 10.3, 10.4 and 10.5 to a Form 6-K/A, respectively, and are incorporated herein by reference.

Issuance of Press Release On June 23, 2025, the Company issued a press release announcing the Private Placements and the launch of its Bitcoin treasury initiative. A copy of the press release is attached to this Form 6-K as Exhibit 99.1 and is incorporated herein by reference.

EXHIBIT INDEX The following exhibit is filed as part of this Form 6-K: Exhibit Description 99.1 Press release dated June 23, 2025

SIGNATURES Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Â Â Â Â Â SEQUANS COMMUNICATIONS S.A. (Registrant) Â Â Date: June 23, 2025 By: Â Â /s/ Deborah Choate Â Â Deborah Choate Â Â Â Â Chief Financial Officer Â Â Document NEWS Sequans Announces \$384M Strategic Investment to Launch Bitcoin Treasury Initiative Paris " June 23, 2025 " Sequans Communications S.A. (NYSE: SQNS) ("Sequans" or the "Company"), a leading developer and provider of 5G/4G IoT semiconductors and modules, today announced it is establishing a bitcoin treasury, marking a strategic expansion alongside its core semiconductor cellular IoT business. To implement this initiative, the Company has agreed to issue and sell approximately \$195 million in equity securities and \$189 million in principal amount of convertible senior secured notes, for total gross proceeds of approximately \$384 million, through private placement offerings. "Our bitcoin treasury strategy reflects our strong conviction in bitcoin as a premier asset and a compelling long-term investment," said Georges Karam, CEO of Sequans. "We believe bitcoin's unique characteristics will enhance our financial resilience and deliver significant value to our shareholders." To implement this initiative, the Company expects to partner with Swan Bitcoin, a leading provider of bitcoin treasury management solutions. While launching this new initiative, Sequans remains committed to its core mission of advancing cellular IoT. "We continue to support our customers with a robust 4G and 5G product roadmap, delivering innovative solutions to meet evolving IoT application needs and ensuring a seamless transition from 4G to 5G," Karam added. The Company has entered into definitive agreements for the purchase and sale of (i) an aggregate of 1,392,857,140 ordinary shares, nominal value \$0.01 per share, of the Company (the "Ordinary Shares"), represented by 139,285,714 American Depositary Shares (the "ADSs") (or pre-funded warrants in lieu thereof), and common warrants to purchase up to 208,928,460 Ordinary Shares represented by 20,892,846 ADSs (or pre-funded warrants in lieu thereof) exercisable within 90 days of the closing of the Equity Private Placement (as defined below), at a combined purchase price of \$1.40 per ADS and common warrant, the equivalent of \$0.14 per Ordinary Share and common warrant at the current ratio, in a private placement (the "Equity Private Placement") and (ii) secured convertible debentures (the "Secured Convertible Debentures") in the aggregate principal amount of \$189 million and common warrants to purchase up to 202,499,980 Ordinary Shares represented by 20,249,998 ADSs (or pre-funded warrants in lieu thereof) exercisable within 90 days of the closing of the Debt Private Placement (as defined below) in a private placement (the "Debt Private Placement")

and, together with the Equity Private Placement, the "Offering"). The Offering is expected to close on or around July 1, 2025, subject to shareholder approval at the Company's ordinary and extraordinary general shareholders' meeting on June 30, 2025 and customary closing conditions. Closing of the Debt Private Placement is contingent upon the completion of the Equity Private Placement for aggregate gross proceeds of not less than \$195 million. Northland Capital Markets and B. Riley Securities served as joint lead placement agents for the Offering. Yorkville Securities served as a placement agent for the Offering. Lowenstein Sandler LLP is acting as U.S. legal counsel and ARCHERS (AARPI) is acting as French legal counsel to the Company. Goodwin Procter, LLP is acting as U.S. and French legal counsel to the placement agents. NEW The securities described above are being offered in a private placement under Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), and/or Regulation D promulgated thereunder and, along with the Ordinary Shares represented by ADSs underlying the Secured Convertible Debentures, the pre-funded warrants and the common warrants, have not been registered under the Securities Act, or applicable state securities laws. Accordingly, such securities may not be offered or sold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements of the Securities Act and such applicable state securities laws. Pursuant to registration rights agreements with investors, the Company will agree to file resale registration statements covering the securities described above. This press release shall not constitute an offer to sell or a solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction. About Sequans Sequans Communications S.A. (NYSE: SQNS) is a leading semiconductor company specializing in wireless cellular technology for the Internet of Things (IoT). Our engineers design and develop innovative, secure, and scalable technologies that power the next generation of connected devices. We offer a wide range of solutions, including chips, modules, IP, and services. Our LTE-M/NB-IoT, 4G LTE Cat 1bis, and 5G NR RedCap/eRedCap platforms are optimized for IoT, delivering breakthroughs in wireless connectivity, power efficiency, security, and performance. Established in 2003, Sequans is headquartered in France and has a global presence with offices in the United States, United Kingdom, Switzerland, Israel, Hong Kong, Singapore, Finland, Taiwan, and China. Visit Sequans at sequans.com and follow us on LinkedIn and X. About Swan Bitcoin Swan is one of the USA's leading Bitcoin-based wealth platforms, serving the fast-growing cohort of Bitcoin investors. Swan's mission-driven team simplifies Bitcoin custody, security, and investment, delivering elite concierge support, exclusive networking, and industry-leading research. Swan services include concierge OTC service, institutional-level liquidity, Bitcoin treasury strategy and operations, tax-loss harvesting, inheritance planning, retirement accounts, and secure custody options. To learn more, please visit swan.com. Forward Looking Statements This press release contains certain statements that are, or may be deemed to be, forward-looking statements with respect to the financial condition, results of operations and business of Sequans, including, but not limited to, with respect to the Offering, the satisfaction of closing conditions, including obtaining shareholder approval, in connection therewith and the use of proceeds therefrom. These forward-looking statements include, but are not limited to, statements that are not historical fact. These forward-looking statements can be identified by the fact that they do not relate to historical or current facts. Forward-looking statements also often use words such as "anticipate," "committed to," "target," "continue," "estimate," "expect," "forecast," "intend," "may," "plan," "goal," "believe," "hope," "aims," "continue," "could," "project," "should," "will" or other words of similar meaning. These statements are based on assumptions and assessments made by Sequans in light of its experience and perception of historical trends, current conditions, future developments and other factors it believes appropriate. By their nature, forward-looking statements involve risk and uncertainty, because they relate to events and depend on circumstances that will occur in the future and the factors described in the context of such forward-looking statements in this announcement could cause actual results and developments to differ materially from those expressed in or implied by such forward-looking statements. Although it is believed that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to be correct, and you are therefore cautioned not to place undue reliance on these forward-looking statements which speak only as at the date of this announcement. Forward-looking statements are not guarantees of future performance. Such forward-looking statements involve known and unknown risks and uncertainties that could significantly affect expected results and are based on certain key assumptions. Such risks and uncertainties include, but are not limited to, potential adverse reactions or changes to business relationships resulting from the completion of the Qualcomm transaction. Many factors could cause actual results to differ materially from those projected or implied in any forward-looking statements. Among the factors that could cause actual results to differ materially from those described in the forward-looking statements are changes in the global, political, economic, business and competitive environments, market and regulatory forces, including tariffs and trade wars. If any one or more of these risks or uncertainties materialize or if any one or more of the assumptions prove incorrect, actual results may differ materially from those expected, estimated or projected. Such forward-looking statements should therefore be construed in the light of such factors. A more complete description of these and other material risks can be found in Sequans' filings with the SEC, including its annual report on Form 20-F for the year ended December 31, 2024, subsequent filings on Form 6-K and other documents that may be filed from time to time with the SEC. Due to such uncertainties and risks, readers are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this announcement. Sequans undertakes no obligation to update or revise any forward-looking statement as a result of new information, future events or otherwise, except as required by applicable law. Contacts Sequans investor relations: David Hanover/Gerrick Johnson, KCSA Strategic Communications (USA), +1 212.682.6300, ir@sequans.com Sequans media relations: Linda Bouvet (France), +33 170721600 media@sequans.com