<table>
<thead>
<tr>
<th>Release 18</th>
<th>The 5G standard</th>
</tr>
</thead>
</table>

**SA2 led - System Architecture & Services**
- XR (Extensibility & Real-time) and media services
- Edge Computing Phase 2
- System Support for 5G/4G Core Services
- 5G UniCASS for NR/5G Network Automation
- 5G/4G network slicing and orchestration
- 5G/4G network and service management

**SA3 led - Security & Privacy**
- Identity and Access Management
- Secure Roaming and Authentication
- Secure Key Management
- Secure Network Function Chaining

**SA4 led - Multimedia Codes, Systems, and Services**
- 5G Multimedia Broadcast & Multicast Services
- 5G Media, Service Enablers
- Split-Bandwidth
- 5G All-Encompassing Experience

**SA6 led - Application Enablement & Critical Communication Applications**
- Critical Communication Protocols
- Critical Communication Core
- Critical Communication Enabler

**SA9 led - Radio Layer 1**
- Radio Frequency
- Radio Resource Control
- Radio Resource Control Policies

**SA11 led - IoT & M2M Connectivity**
- IoT Connectivity
- M2M Connectivity
- Context Management

**SMB led - Systems Management**
- Systems Management
- Systems Management Policies
- Systems Management Enabler

**3GPP** - October 2022

---

**Early Release 19 Studies**
- **SA1 - Services**
  - Network of Service Robots with Ambient Intelligence
  - Energy Efficiency as Service Criteria
- **SA2 - System Architecture & Services**
  - Upper Layer Traffic Steering and Split over 5G/4G Services
  - Uncrewed Aerial Vehicles (Phase 3)
- **SA3 - Security & Privacy**
  - Access Control (Phase 3)
  - Access Control in 5G/4G Networks
- **SA4 - Multimedia Codes, Systems, and Services**
  - Media & Multimedia Services
  - Media & Multimedia Services Enablers
- **SA6 - Application Enablement & Critical Communication Applications**
  - Critical Communication Use Cases
  - Critical Communication Services
- **SA8 - Network Interfaces**
  - Network Interfaces
  - Network Interfaces Enabler
- **SA9 - Radio Layer 1**
  - Radio Layer
  - Radio Layer 1
- **SA10 - 3GPP Radio Network Interfaces**
  - 3GPP Radio Network Interfaces
  - 3GPP Radio Network Interfaces Enabler
- **SA11 - IoT & M2M Connectivity**
  - IoT Connectivity
  - M2M Connectivity
- **SA13 - Systems Management**
  - Systems Management
  - Systems Management Policies

---

**Release Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re1-0</td>
<td>Re1-10</td>
<td>Re1-16</td>
<td>Re1-17</td>
<td>Re1-18</td>
<td>Re1-19</td>
</tr>
</tbody>
</table>

---

**Specification**

- **TSG CT**
  - Core Network and Terminal Interfaces
  - Core Network and Terminal Interfaces Enabler
- **TSG RAN**
  - Radio Access and Terminal Interfaces
  - Radio Access and Terminal Interfaces Enabler
- **TSG SA**
  - Service and System Aspects
  - Service and System Aspects Enabler