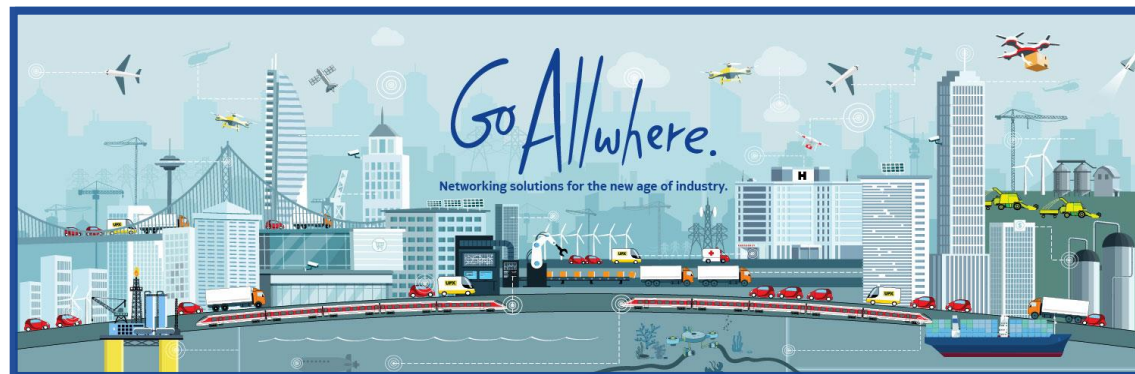


## Development Projects and Products for Your Future X Network

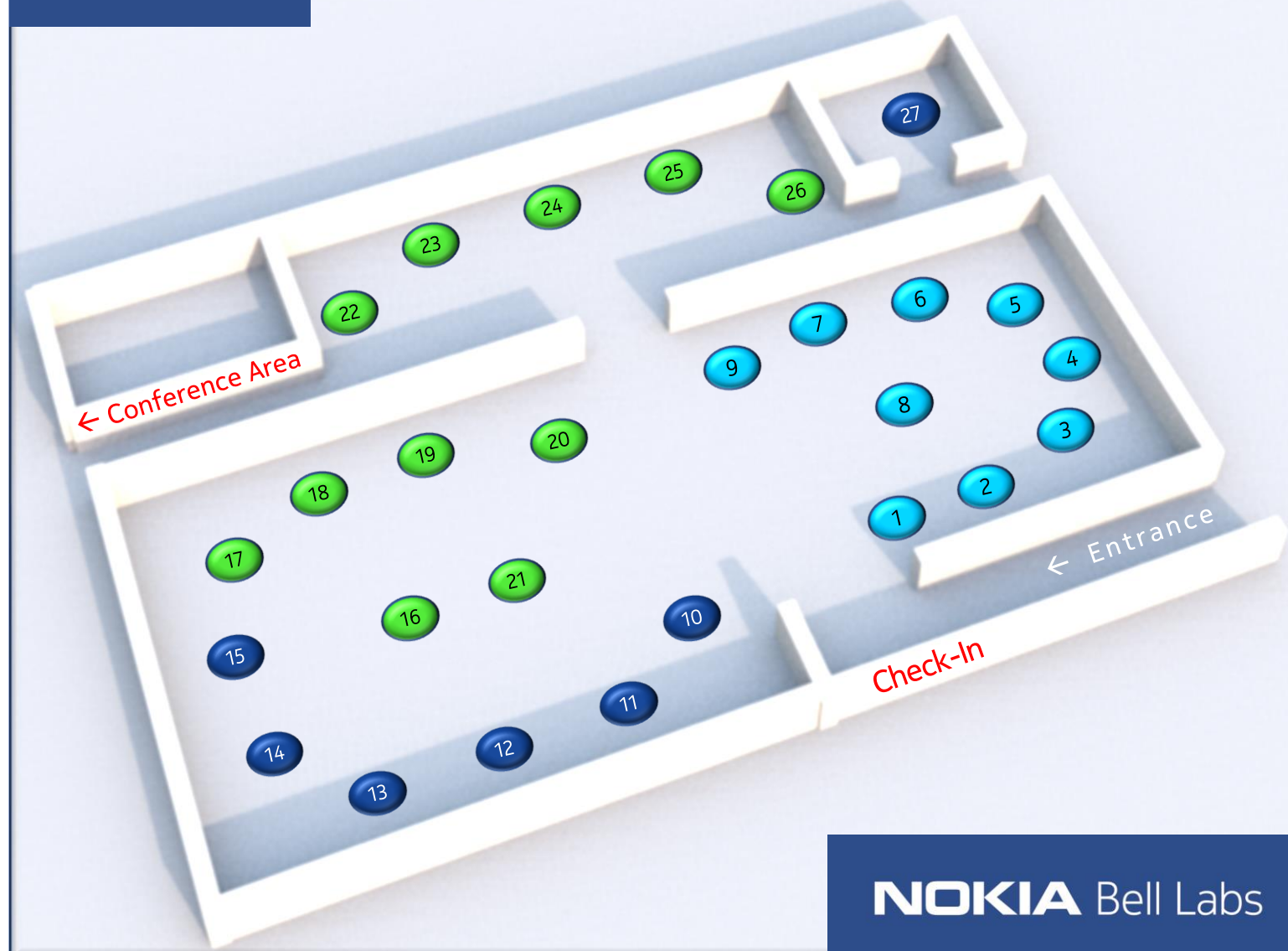
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| <b>16</b> GMPLS Fast Restoration in Massive WDM Networks | Nokia leading in network scalability and single domain control plane restoration |
| <b>17</b> Photonic Service Engine 3                      | Taking light to the limit!   |
| <b>18</b> Nokia Optical LAN                              | Exceed the expectations of your LAN performance                                  |
| <b>19</b> Nokia Fiber Evolution                          | 10G XGS-PON, 25G PON and MPM/Combo   |
| <b>20</b> Nokia Software Defined Access Networks         | Solutions to grow your business  |
| <b>21</b> 5G: Tactile Demo                               | Revolutionizing professional experiences with 5G                                 |
| <b>22</b> Nokia WiFi Experience                          | Enjoy WiFi without interruptions   |
| <b>23</b> Connect fixed subscribers with wireless 5G     | Comprehensive solution package for consumer full-home service                    |
| <b>24</b> Magnetic 5G Demo                               | Industry 4.0 – 5G connected, remote controlled Robots                            |
| <b>25</b> 5G Live Demo                                   | 5G cmWave NSA system live onAir  |
| <b>26</b> 5G RAN evolution with network slicing          | 5G RAN slicing use cases in an industrial area of a city                         |



## Business Ideas for Your Future X Network

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|------------------------|--|
| <b>27</b> 5G Ping Pong | Revolutionizing consumer experiences with 5G |
|------------------------|--|

**NOKIA**



## NOKIA Bell Labs Research Projects for Your Future X Network

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|--|--|
| <b>1</b> The future of high-speed access system-technology   | Digital Signal Processing (DSP)-era in optical access – 50 Gbit/s TDM-PON                                      |
| <b>2</b> Diagnostics for your valuable fibre infrastructure  | Prototyping an intelligent, system-independent fiber infrastructure management layer                           |
| <b>3</b> Passive Optical Networks for 5G Anyhaul   | Exploiting mobile traffic dynamics with low-latency techniques   |
| <b>4</b> Elastic RAN in an E2E System  | Cloud RAN and CN Resource and QoS Management in Multiple-Network Slice Context                                 |
| <b>5</b> A flexible, deterministic and highly reliable end-to-end communication network for industrial automation systems. | End-To End communication network for future factory floors   |
| <b>6</b> Nokia Bell Labs “MicroFunctions” Serverless Platform  | Serverless Made Fast and Efficient   |
| <b>7</b> Edge Cloud Deployment of Enterprise Communication   | Zero-Touch Service Management for End-to-End Telecommunication Applications                                    |
| <b>8</b> Data Center Interconnection with Terabit Channels   | 50.8 Tb/s Transmission Capacity Record Over Deployed Fiber Network Enabled by Single-Carrier Terabit+-Channels |
| <b>9</b> Arena 2036  | Research campus for the collaboration of the future  |

## Business Ideas for Your Future X Network

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|--|---|
| <b>14</b> Digital automation through Private Wireless in manufacturing and logistics | Enhanced productivity through digitalized manufacturing processes |
| <b>15</b> Automated guided vehicles and High Accuracy Indoor Positioning             | Nokia Digital Automation Cloud (NDAC)                             |

## Business Ideas for Your Future X Network

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|---|--|----------------------------|--|
| <b>12</b> Artificial intelligence for logistics optimization                | Improved performance for asset intensive industries                      | <b>10</b> Connected Cities | Building more attractive, sustainable and safer cities |
| <b>13</b> Operational efficiency in Mining & Airports with Private Wireless | Digitalize operations for intelligent insights and enhanced productivity | <b>11</b> 5G security      | Predictive and automated security operations           |