

SPRINX TECHNOLOGIES

SOME OF OUR MAIN REFERENCES IN TRAFFIC AND TRANSPORTATION MARKET

June 2018


Sprinx Technologies is a young company founded in late 2009 which boasts both technical and commercial professionalism. Thanks to the calibre of its client partners, in its short history it has already completed numerous important and prestigious projects. Here below some of the most relevant in the Transportation market.

Year	System	Material provided	System description
2010	ANAS Motorway SS38 dello Stelvio Bolladore, Mondadizza, Le Prese, Verzedo and Sant'Antonio-Tola-Cepina Tunnels Sondrio (SO) Italy	253 D&N analogue cameras for traffic monitoring, 10 pan & tilt cameras for tunnel entry/exit control, 4 SX-PLATE OCR number plate reading systems, 30 digital EVX video recorders, 41 AID SX-TRAFFIC systems, 2 TVM remote control terminals.	<i>Traffic monitoring system consisting of over 260 tunnel cameras dedicated to surveillance and automatic incident detection, with camera units dedicated to the reading of number plates in transit, with a video recording system and video management and video monitoring software for the local control room and the remote client at the local ANAS dept., interfacing with the CCTV system and AID with the road SCADA system.</i>
2010-2014	Tunnelgest - ANAS Lombardy Dept. – Various Tunnels SS36, SS36DIR, SS336, SS42, SS45BIS, SS237, SS344, SS340REG national highways. Italy	1200 D&N analogue cameras, 100 EVX model digital video recorders, 150 AID SX-TRAFFIC automatic traffic monitoring systems, 10 back-up servers for storing alarm sequences, 10 TVM head controllers for road/highway, 2 TVM video management & video monitoring servers in master-slave configuration, 3 SX-DECODE decoding software programs for generating virtual matrices in the control rooms, 3 control rooms, interfacing with Tunnelgest SCADA system.	<i>Traffic monitoring system in the Tunnelgest - ANAS Lombardy Dept. tunnels - composed of over 1200 tunnel cameras dedicated to monitoring and automatic incident detection through video analysis algorithms, with video recording system, and with video management and video monitoring software for control rooms, with the function of a virtual matrix, complete with interface with the SCADA system.</i>

Year	System	Material provided	System description
2010	Motorway Vedeggio-Cassarate Canton of Ticino Switzerland	60 D&N analogue cameras, 4 DVX model DVR digital video recorders, 15 CVX model blade version 4-ch video encoders, 3 AID SX-TRAFFIC traffic analysis systems, 2 SX-DECODE model decoding stations, 1 TVM head controller interfaced with RCOM SCADA	<i>Traffic monitoring system consisting of tunnel cameras dedicated to the automatic incident detection, with video recording system and with video management and video monitoring software for control rooms, with an interface with the SCADA system.</i>
2010	Lucerne CityRing Canton of Lucerne Switzerland	50 CVX model blade version 4-ch video encoders, 20 CVX model 1-ch video decoders, 1 TVM head controller interfaced with the Canton SCADA system.	<i>Traffic monitoring system composed of video servers for the digitisation of analogue video signals from the camera units present in the field and by video management and video monitoring software for control rooms, with an interface with the SCADA system.</i>
2010	A16 Roche-Court Motorway Moutier and Aux Laives tunnels Switzerland	38 D&N cameras for traffic monitoring, 4 SX-TRAFFIC traffic analysis systems, 1 TVM head controller interfaced with the Canton SCADA system	<i>Traffic monitoring system consisting of an automatic incident detection system, with video recording system, and video management and video monitoring software for control rooms, with an interface with the Swiss Canton SCADA system.</i>
2011	Refitting of SALT (Società Autostrada Ligure Toscana Italia) Motorway operations room	16 DVX model multistream video encoders with digital video recorder function, 1 remote control terminal operating via TVM video management and video monitoring software.	<i>Traffic monitoring system for the new A12 SALT motorway control room, composed of multistream video servers to digitise analogue video signals from the field and with video management and video monitoring system for supervision in the control room.</i>
2011	Marcolet and Cheseaux Tunnel Switzerland	24 D&N analogue cameras, 2 DVX model digital video recorders, 1 AID SX-TRAFFIC traffic analysis system, 1 backup server for storing alarm sequences, 1 TVM head controller interfaced with the Canton SCADA system	<i>Traffic monitoring system consisting of tunnel camera units, with an automatic incident detection system, with video recording system, with back-up software for the protection of the alarm sequences, and with video management and video monitoring software for control rooms, with an interface with the Swiss Canton SCADA system.</i>



Year	System	Material provided	System description
2012-2013	ANAS SS36 Motorway Monza Underpass Monza (Monza-Brianza) Italy	66 D&N IP cameras for traffic monitoring, 8 pan & tilt cameras, 2 DOMINO Network Video Recorder software programs, 3 AID SX-TRAFFIC traffic analysis systems, remote control terminals operating via TVM video management and video monitoring software, interfacing with tunnel SCADA system	<i>Traffic monitoring system for the longest urban tunnel in Italy and one of the longest in Europe, the Monza tunnel, composed of high-resolution IP camera units installed in the tunnel and in the emergency lay-by, with an automatic incident detection system, with video recording system and video management and video monitoring software for the control rooms, with an interface with the SCADA system.</i>
2012-2014	ANAS SS145 "Sorrentina" Motorway Naples (NA) Italy	62 D&N IP cameras for traffic monitoring, 8 pan & tilt cameras, 2 OCR number plate reading and Kemler code systems, 3 DOMINO Network Video Recorder software programs, 8 SX-TRAFFIC automatic traffic monitoring AID systems, remote control terminals operating via TVM video management and video monitoring software, interfacing with tunnel SCADA system	<i>Traffic monitoring system composed of IP tunnel cameras dedicated to the automatic incident detection, with camera units for reading number plates and hazardous cargo in transit, with video recording system and video management and video monitoring software for the control room, with an interface with the SCADA system.</i>
2012-2014	ANAS A3 Motorway Salerno-Reggio Calabria Macro Lotto 6 Monacena, Paci, Pilone and Piale Tunnels Reggio Calabria (RC) Italy	73 D&N analogue cameras for traffic monitoring, 15 pan & tilt cameras, 7 digital video recorders, 11 SX-TRAFFIC automatic traffic monitoring system, 1 remote control terminal operating via TVM video management and video monitoring software, interfacing with tunnel/road SCADA system.	<i>Traffic monitoring system consisting of tunnel cameras dedicated to the automatic incident detection, with video recording system and video management and video monitoring software for the control room, with an interface with the SCADA system.</i>

Year	System	Material provided	System description
2013	A16 Roche-Court Motorway Graitery and Gorges tunnels Switzerland	46 D&N analogue cameras for monitoring traffic, 12 CVX model blade version 4-ch video encoders, 5 AID SX-TRAFFIC traffic analysis systems, 2 DOMINO Network Video Recording servers, 1 backup server for storing alarm sequences, 1 TVM head controller interfaced with the Canton SCADA system	<i>Traffic monitoring system consisting of tunnel camera units, with an automatic incident detection system, with video recording system, with back-up software for the protection of the alarm sequences and video management and video monitoring software for control rooms, with an interface with the Canton SCADA system.</i>
2013	Bern Bypass Switzerland	58 D&N cameras for traffic monitoring, 33 CVX model 4-ch video encoders, 2 DOMINO Network Video Recording servers, 1 TVM head controller interfaced with the Canton SCADA system	<i>Video surveillance system for monitoring traffic, consisting of the video encoder for the digitisation of existing analogue camera units, with video recording system and video management and video monitoring software, interfaced with the Canton SCADA system.</i>
2014	A2 Motorway Melide-Grancia Tunnel Mendrisio-Lugano South section Canton of Ticino Switzerland	50 Full HD cameras, 39 SX-TRAFFIC AID traffic analysis licences, 50 DOMINO Network Video Recording licences, 1 BackupUNIT application, 1 TVM head controller interfaced with the Canton SCADA system.	<i>Video surveillance and automatic incident detection system for monitoring traffic in the tunnel, consisting of digital cameras, video recording system, video management and video monitoring system interfaced and integrated with the Swiss Canton SCADA system.</i>
2014	ANAS A3 Motorway Salerno-Reggio Calabria Macro Lotto 3 Part I Sardina I, Sardina II, Costa del Monte, Serra Rotonda Tunnels Potenza (PZ) Italy	84 D&N fixed cameras for traffic monitoring, 14 D&N fixed cameras for controlling the bypasses, 8 Speed Domes at the tunnel entrances/exits, 34 CVX model, 4-ch video encoders, 4 DOMINO Network Video Recording servers, 84 AID SX-TRAFFIC channels, 1 Sprinx TVM head controller interfaced with the Siemens road SCADA system.	<i>Video surveillance system on the A3 Motorway for monitoring traffic inside tunnels, consisting of cameras dedicated to the automatic incident detection and movement analysis on the bypasses, with video recording system and video management and video monitoring software, interfaced with the Siemens tunnel/road SCADA system.</i>




Year	System	Material provided	System description
2014-2019 	Pedemontana Lombarda Motorway, Lomazzo (Como) – Osio (Brescia) Section Italy	788 D&N Full HD cameras for traffic monitoring on the road and in the tunnel, 528 IP Speed Domes, 125 number plate reading systems (plate/Kemler code), 74 DOMINO Network Video Recording servers, 657 AID SX-TRAFFIC channels, 39 TVM head controllers interfaced with the Pedemontana SCADA system	<i>Traffic monitoring system on the new stretch of the Pedemontana Lombarda Motorway (Lomazzo-Osio), consisting of 1300 cameras, both speed domes and fixed cameras on the road and in the tunnel dedicated to automatic incident detection and number plate reading (plate/Kemler code), with video recording system and video management and video monitoring software for the central control room, with interface with the SCADA system.</i>
2014	Tangenziale Est Esterna di Milano (TEEM) Bypass Italy	58 IP D&N cameras for traffic monitoring on the road, 31 IP Speed Domes, 2 DOMINO Network Video Recording servers, 1 TVM head controller.	<i>Traffic monitoring system on the new stretch of the TEEM composed of speed dome and fixed cameras on the road, with video recording system and video management and video monitoring software for the central control room.</i>
2014	EXPO 2015 Project Cascina Merlata Tunnel Milan (MI) Italy	50 IP Day & Night fixed cameras, 4 IP Day & Night Speed Domes, 50 AID traffic analysis licences SX-TRAFFIC, 54 DOMINO Network Video Recording licences, 1 TVM video management & video monitoring software.	<i>Video surveillance system for monitoring traffic in the EXPO2015 tunnel, composed of cameras dedicated to the automatic incident detection, with video recording system and video management and video monitoring software, interfaced with the tunnel SCADA system and supervision client repositioned at the central control room of the Province of Milan.</i>

Year	System	Material provided	System description
2014-2017	A3 Motorway Salerno-Reggio Calabria Km 0-108 (roads, tunnels and junctions) Campania – Basilicata Italy	130 smart cameras with Sprinx AID traffic analysis on-board, 200 Full HD Day & Night fixed cameras, 40 HD Day & Night Speed Domes, 170 SX-TRAFFIC AID traffic analysis licences, 370 DOMINO Network Video Recording licences, 4 BackupUNIT software packages, 5 TVM video management & video monitoring software programs, software interfaces for communication with third parties (Datex2 and Modbus protocols).	<i>Video surveillance system for monitoring traffic on the first 108km of the A3 SA-RC motorway, consisting of more than 350 cameras dedicated to automatic incident detection along the entire route, both on the road and in the tunnel, with video analysis of the junctions, through AID software, with video recording system and video management and video monitoring software, interfaced locally with the traffic technological systems -(opacimeter, radar, SOS points, laser fibre, PMV) and centrally with the ANAS RMT SCADA system.</i>
2014	KOM VTV GE XI Flüelen and Göschenen control rooms Highway/Motorway Swiss sections: - Gotthard Pass - Gotthard Tunnel - Amsteg-Göschenen - Amsteg-Büel - Seelisberg Tunnel - Flüelen-Mosi North - Mosi Tunnel - Grenze-Rütenen	400 DOMINO Network Video Recording licences, 2 BackupUNIT software programs, 2 TVM video management & video monitoring servers in Master- Slave configuration	<i>Supervision and video management system for central control rooms of Flüelen and Göschenen dedicated to nine sections of highway/motorway (Gotthard Pass, the Gotthard Tunnel, Amsteg-Göschenen, Amsteg-Büel, Seelisberg Tunnel, Flüelen-Mosi North, Mosi Tunnel, Grenze-Rütenen) for centralisation of over 400 video signals, developed within the USTRA project aimed at normalisation of Swiss motorway supervisory control rooms.</i>
2015	ANAS Motorway S.S. 726 Cesena Tunnel Vigne Italy	52 IP Day & Night fixed cameras, 2 IP Day & Night Speed Domes, 40 AID traffic analysis licences SX-TRAFFIC, 54 DOMINO Network Video Recording licences, 1 TVM video management & video monitoring software.	<i>Video surveillance system for monitoring traffic in the Vigne tunnel, composed of cameras dedicated to the automatic incident detection, with video recording system and video management and video monitoring software, interfaced with the tunnel SCADA system and supervision client repositioned at the central control room of Anas Bologna Department.</i>

Year	System	Material provided	System description
2015 - 2016	Motorway A5 ATIVA Tunnels Quassolo and Passo d'Avenco Piemonte Italy	20 AID traffic analysis licences SX-TRAFFIC, 1 TVM video management & video monitoring software, communication protocol with Indigo Vision VMS platform and with Sinelec SCADA called Sincro.	<i>Traffic monitoring in tunnels composed of cameras dedicated to the automatic incident detection, interfaced with the Ativa Motorway video recording system and with the Sinelec SCADA system.</i>
2015-2016	ANAS Motorway S.S. 340 "Regina" Dogana and Albogasio Tunnels Italy	91 Day & Night fixed cameras, 3 IP Day & Night Speed Domes, 27 4 channels video encoder, 79 AID traffic analysis licences SX-TRAFFIC, 94 DOMINO Network Video Recording licences, 2 TVM video management & video monitoring software, interfaced with the ANAS road SCADA system.	<i>Video surveillance system for monitoring traffic in the Dogana and Albogasio tunnels, composed of cameras dedicated to the automatic incident detection, with video recording system and video management and video monitoring software, interfaced with the tunnel Anas SCADA system.</i>
2015-2017	ANAS A3 Motorway Salerno-Reggio Calabria Macro Lotto 3 Part II Iannello I, Iannello II, Laria, Colle Trodo, La Carpineta, Mormanno, Donna di Marco, Campotenese Tunnels Potenza (PZ) Italy	96 D&N fixed cameras for traffic monitoring, 26 D&N fixed cameras for controlling the bypasses, 6 DOMINO Network Video Recording servers, 122 AID SX-TRAFFIC channels, interfaced with the ANAS road SCADA system.	<i>Video surveillance system for monitoring traffic inside tunnels, consisting of cameras dedicated to automatic incident detection and movement analysis on the bypasses, with video recording system and video management and video monitoring software, interfaced with the ANAS tunnel/road SCADA system</i>
2016	Consorzio per le Autostrade Siciliane Motorway A20 Tindari and Capo d'Orlando Tunnels Messina (ME) Italy	72 IP Day & Night fixed cameras, 20 IP Thermal fixed cameras, 4 IP Day & Night Speed Domes, 56 AID traffic analysis licences SX-TRAFFIC, 96 DOMINO Network Video Recording licences, 2 TVM video management & video monitoring software.	<i>Video surveillance system for monitoring traffic inside tunnels Tindari and Capo d'Orlando in Sicily, consisting of cameras dedicated to automatic incident detection and movement analysis on the bypasses, with video recording system and video management and video monitoring software, interfaced with the ANAS tunnel/road SCADA system</i>

Year	System	Material provided	System description
2016 -2017	Motorway N2 Tunnel Gentilino Switzerland	6 IP Thermal fixed cameras, 6 AID traffic analysis licences SX-TRAFFIC, Moxa communication protocol.	<i>Video surveillance system for monitoring traffic outside the tunnel, consisting of cameras dedicated to automatic incident detection able to analyze the traffic flow and detect queue, interfaced with the Motorway tunnel/road SCADA system.</i>
2016 -2017	Motorway Pedemontana Veneta – Section A and Tunnel St. Urbano Vicenza (VI) Italy	109 IP Day & Night fixed cameras, 17 IP Day & Night Speed Domes, 95 AID traffic analysis licences SX-TRAFFIC, 39 DOMINO Network Video Recording licences, 1 TVM video management & video monitoring software, interfaced with the Pedemontana Veneta road SCADA system.	<i>Video surveillance system for monitoring traffic in the first motorway section and in the tunnel St.Urbano of the new motorway Pedemontana Veneta (90 km), composed of cameras dedicated to automatic incident detection, with video recording system and video management and video monitoring software, interfaced with the tunnel SCADA system and supervision client repositioned at the central control room of Pedemontana Veneta.</i>
2016 -2017	Motorway A13 Tunnel Mappo- Morettina Canton Ticino Switzerland	55 IP Day & Night fixed cameras, 55 AID traffic analysis licences SX-TRAFFIC, 72 DOMINO Network Video Recording licences, 2 Back Up Unit licenses, 3 Decoding Station licenses, 1 TVM video management & video monitoring software, interfaced with Canton SCADA system.	<i>Video surveillance and automatic incident detection system for monitoring traffic in the tunnel, consisting of digital cameras, video recording system, video management and video monitoring system interfaced and integrated with the Swiss Canton SCADA system.</i>
2017 -2018	 ANAS Motorway E78 Grosseto Fano Tunnel Casal di Pari Italy	19 IP Day & Night fixed cameras, 8 IP Day & Night Speed Domes, 28 AID traffic analysis licences SX-TRAFFIC, 41 Network Video Recording NVX-G licences.	<i>Video surveillance system for monitoring traffic inside the tunnel, consisting of cameras dedicated to automatic incident detection, with video recording system, interfaced with the ANAS tunnel/road SCADA system</i>
2017 -2018	 ANAS Motorway SS3bis Tiberina E45 Tunnel Roccaccia Italy	31 IP Day & Night fixed cameras, 4 IP Day & Night Speed Domes, 26 AID traffic analysis licences SX-TRAFFIC, 35 Network Video Recording NVX-G licences.	<i>Video surveillance system for monitoring traffic inside the tunnel, consisting of cameras dedicated to automatic incident detection, with video recording system, interfaced with the ANAS tunnel/road SCADA system</i>

Year	System	Material provided	System description
2017	NDS tunnels Horelica, P'olana, Svrčinovec Zilina Slovakia	21 AID traffic analysis licences SX-TRAFFIC, 85 DOMINO Network Video Recording licences.	<i>Video surveillance system for monitoring traffic inside tunnels, in the D3 Slovakian motorway, consisting of automatic incident detection system to detect events and collect traffic data, with video recording system and video management and video monitoring software, interfaced with the SIEMENS tunnel/road SCADA system</i>
2017	Tunnel Krakow Krakow Poland	16 AID traffic analysis licences SX-TRAFFIC, 1 OPC communication protocol	<i>Video surveillance system for monitoring traffic inside the tunnel of the Krakow City, consisting of automatic incident detection system to detect traffic events, interfaced with the SIEMENS tunnel/road SCADA system</i>
2017	Motorway A1 Paris-Charles de Gaulle Paris France	14 AID traffic analysis licences SX-TRAFFIC, 1 OPC communication protocol	<i>Video surveillance system for monitoring the motorway and detect pedestrian on the road, consisting of automatic incident detection system connected to thermal cameras installed outside on the Highway A1 which connects the Charles de Gaulle Airport to the city center, interfaced with the Teleste VMS installed in the central control room of the City of Paris</i>
2017	Kepno bypass project Kepno Poland	6 AID smart cameras with on board the Sprinx Traffic licence SWX-SPRINX AID, 1 Traffic Hub Gecko platform, 6 DOMINO Network Video Recording licences, 1 OPC communication protocol.	<i>Video surveillance system for monitoring the motorway junctions, consisting of automatic incident detection system on-board smart cameras, interfaced with the SIEMENS tunnel/road SCADA system</i>

Year	System	Material provided	System description
2017-2019 	GE 10 Motorway N02, N04, N08, N14 Switzerland	260 IP Day & Night fixed cameras, 4 IP Day & Night Speed Domes, 190 AID traffic analysis licences SX-TRAFFIC, 260 DOMINO Network Video Recording licences, 2 Back Up Unit licenses, 8 TVM video management & video monitoring software, 52 Decoding Station licenses,	<i>Extention of the supervision and video management system for central control rooms of Flüelen and Göschenen dedicated to nine sections of highway/motorway (Gotthard Pass, the Gotthard Tunnel, Amsteg-Göschenen, Amsteg-Büel, Seelisberg Tunnel, Flüelen-Mosi North, Mosi Tunnel, Grenze-Rütene) and revamping of the video recording system and of the automatic incident detection system in the Swiss Cantons Obwalden and Nidwalden</i>
2018	Progon & Przojna Padina Tunnels Highway E-80 Serbia	35 AID traffic analysis licences SX-TRAFFIC, 1 ModBUS communication protocol	<i>Video surveillance system for monitoring traffic inside the tunnels, consisting of automatic incident detection system to detect traffic events, interfaced with the tunnel SCADA system</i>
2018-2019 	CITYRING LUZERN Giswil Tunnel Kirchenwald Tunnel Lopper Road Tunnel Lungern Bypass Tunnel Sachseln Tunnel Stansstad Tunnel Zollhaus Tunnel Motorway A8	192 AID traffic analysis licences SX-TRAFFIC, 8 TVM video management & video monitoring software	<i>Video surveillance system for monitoring traffic inside the tunnels, consisting of automatic incident detection system to detect traffic events, interfaced with the Canton SCADA system</i>
2018-2019 	Rubigen – Thun – Spiez (RUTS) Allmendtunnel Motorway A6	22 AID traffic analysis licences SX-TRAFFIC, 1 TVM video management & video monitoring software	<i>Video surveillance system for monitoring traffic inside the tunnel, consisting of automatic incident detection system to detect traffic events, interfaced with the Canton SCADA system</i>