Claims

1. Surveillance system (1) for an infrastructure and/or for a vehicle, comprising
- at least two sensor modules (2a-2d) configured to collect respective sensor data (I, F1, F2, V) from a respective associated sensor (3a-3d);
- an analysis module (5) configured to access the sensor data (I, F1, F2, V);
characterized in that
- the sensor modules (2a-2d) are configured to provide the sensor data (I, F1, F2, V) with a time stamp; and
- the analysis module (5) is configured to detect a given event based on sensor data (I, F1, F2, V) of at least one first sensor module (2a-2d) and to associate sensor data (I, F1, F2, V) of at least one other second sensor module (2a-2d) with the event based on the time stamps of the sensor data (I, F1, F2, V),

wherein the analysis module (5) is configured to associate the sensor data (I, F1, F2, V) of the second sensor module (2a-2d) with the event based on a spatial relation between a location of the sensor associated with the first sensor module (2a-2d) and a location of the sensor associated with the second sensor module (2a-2d),

wherein the analysis module is configured that only sensor data (I, F1, F2, V) of second sensor modules (2a-2d) with the associated sensor within/or outside of a given distance from the associated sensor of the first sensor module (2a-2d) is associated with the event.

2. System (1) according to claim 1, characterized in that only sensor data (I, F1, F2, V) with a time stamp indicating a time which differs from an event time by less than a given maximum time interval is associated with the event, where the event time is determined by the time stamp of the sensor data (I, F1, F2, V) the detection of the event is based on.

3. System (1) according to any of the preceding claims, characterized in that the spatial relation comprises a characteristic different from a distance of the respective sensors of the sensor modules (2a-2d), in particular a characteristic for the sensors being separated by a wall and/or a characteristic for the sensors being in the same room.

4. System (1) according to any of the preceding claims, characterized in that the analysis module (5) is configured to verify (C) the detection of the event based on the sensor data (I, F1, F2, V) associated with the event and/or the sensor data (I, F1, F2, V) of the first sensor module (2a-2d).

5. System (1) according to any of the preceding claims, characterized in that the analysis module (5) is configured to classify and/or verify (C) the detected event according to given event classes, and, based on the class the detected event is classified to belong to, associate sensor data (I, F1, F2, V) of a p re-determined sensor module (2a-2d) and/or sensor data (I, F1, F2, V) of a pre-determined type of sensor modules (2a-2d) with the event.

6. System (1) according to any of the preceding claims, characterized in that the analysis module (5) is configured to, based on the detected event and/or the class of the detected event, trigger an alarm output to an operator or to the public by a

corresponding output module (8).

7. System (1) according to any of the preceding claims, characterized in that the analysis module (5) is configured to forward the sensor data (I, F1, F2, V) to an output module (8), in particular an output module (8) with a monitor and/or a loudspeaker.

8. System (1) according to the preceding claim, characterized in that the analysis module (5) is configured to, when an event is detected, automatically access the sensor data (I, F1, F2, V) associated with the event and forward the associated sensor data (I, F1, F2, V) to the output module (8).

9. System (1) according to any of claims 7 or 8, characterized in that the analysis module (5) is configured to forward the sensor data (I, F1, F2, V) of the different sensor modules (2a-2d) to the output module (8) in a synchronized way.

10. System (1) according to any of the preceding claims, characterized in that the sensor modules (2a-2d) are of at least two different types, where each type of sensor module (2a-2d) is associated with a different type of sensor (3a-3d) and is configured to collect a different type of sensor data (I, F1, F2, V).

11. System (1) according to claim 10, characterized in that each of the different types of sensor modules (2a-2d) is associated with at least one of the following sensors as respective sensor (3a-3d): camera sensor, multi-camera sensor, microphone sensor, multi microphone sensor, temperature sensor, fire alarm sensor, smoke sensor, voltage sensor, power consumption sensor, door sensor, emergency bottom sensor, escalator load sensor, vehicle load sensor, electronic current sensor, flow rate sensor, pressure sensor, rotational and/or translational speed sensor, rotational and/or translational acceleration sensor, vibration sensor, motion detection sensor, radar sensor, Hall sensor, ultrasonic sensor, GPS sensor, load cell sensor, light barrier sensor.

12. System (1) according to any of the preceding claims, characterized by at least one storage module configured to access and store the sensor data (I, F1, F2, V) of the sensor modules (2a-2d), where the at least one analysis module (5) is configured to access the sensor data (I, F1, F2, V) in the sensor module (2a-2d) and/or the sensor data (I, F1, F2, V) in the storage module.

13. System (1) according to any of the preceding claims, characterized by a clock module (4) configured to provide a common time signal (t) to some or all sensor modules (2a-2d) and/or the analysis module (5), where the time stamp of the sensor modules (2a-2d) is based on the common time signal (t).

14. Method for surveilling an infrastructure and/or a vehicle, with the method steps:
- collecting, by at least two sensor modules (2a-2d), respective sensor data (I, F1, F2, V) from a respective sensor (3a-3d) associated with the respective sensor module (2a-2d);
- accessing, by at least one analysis module (5), the sensor data (I, F1, F2, V);
- providing, by the sensor modules (2a-2d), the sensor data (I, F1, F2, V) with a time

stamp;

- detecting (D), by the analysis module (5), a given event based on sensor data (I, F1, F2, V) of at least one first sensor module (2a-2d) and to associate sensor data (I, F1, F2, V) of at least one other second sensor module (2a-2d) with the event based on the time stamps of the sensor data (I, F1, F2, V),

- associating, by the analysis module (5), the sensor data (I, F1, F2, V) of the second sensor module (2a-2d) with the event based on a spatial relation between a location of the sensor associated with the first sensor module (2a-2d) and a location of the sensor associated with the second sensor module (2a-2d),

wherein, in the associating, only sensor data (I, F1, F2, V) of second sensor modules (2a-2d) with the associated sensor within/or outside of a given distance from the associated sensor of the first sensor module (2a-2d) is associated with the event.