performing radio resource management, for performing contention window resizing, for generating the information elements, etc. according to any of the embodiments.

[0091] The apparatus **1500** may further comprise radio interface components (TRX) **1506** providing the apparatus with radio communication capabilities with the radio access network. The radio interface components **1506** may comprise standard well-known components such as amplifier, filter, frequency-converter, (de)modulator, and encoder/decoder circuitries and one or more antennas. Even though the description has been written from the viewpoint of a wireless local area network, the embodiments may be applicable to other wireless network technologies having similar active scanning approach. The other technologies may comprise cognitive radio networks and/or other applicable wireless networks, for example.

[0092] As used in this application, the term 'circuitry' refers to all of the following: (a) hardware-only circuit implementations, such as implementations in only analog and/or digital circuitry, and (b) combinations of circuits and software (and/or firmware), such as (as applicable): (i) a combination of processor(s) or (ii) portions of processor(s)/software including digital signal processor(s), software, and memory (ies) that work together to cause an apparatus to perform various functions, and (c) circuits, such as a microprocessor (s) or a portion of a microprocessor(s), that require software or firmware for operation, even if the software or firmware is not physically present. This definition of 'circuitry' applies to all uses of this term in this application. As a further example, as used in this application, the term 'circuitry' would also cover an implementation of merely a processor (or multiple processors) or a portion of a processor and its (or their) accompanying software and/or firmware. The term 'circuitry' would also cover, for example and if applicable to the particular element, a baseband integrated circuit or applications processor integrated circuit for a mobile phone or a similar integrated circuit in a server, a cellular network device, or another network device.

[0093] The techniques and methods described herein may be implemented by various means. For example, these techniques may be implemented in hardware (one or more devices), firmware (one or more devices), software (one or more modules), or combinations thereof. For a hardware implementation, the apparatus(es) of embodiments may be implemented within one or more application/specific integrated circuits (ASICs), digital signal processors (DSPs), digital signal processing devices (DSPDs), programmable logic devices (PLDs), field programmable gate arrays (FPGAs), processors, controllers, micro-controllers, microprocessors, other electronic units designed to perform the functions described herein, or a combination thereof. For firmware or software, the implementation can be carried out through modules of at least one chip set (e.g. procedures, functions, and so on) that perform the functions described herein. The software codes may be stored in a memory unit and executed by processors. The memory unit may be implemented within the processor or externally to the processor. In the latter case, it can be communicatively coupled to the processor via various means, as is known in the art. Additionally, the components of the systems described herein may be rearranged and/or complemented by additional components in order to facilitate the achievements of the various aspects, etc., described with regard thereto, and they are not limited to the precise configurations set forth in the given figures, as will be appreciated by one skilled in the art.

[0094] Thus, according to an embodiment, the apparatus comprises processing means configured to carry out embodiments of any of the FIGS. **1** to **15**. In an embodiment, the at least one processor **1402**, the memory **1404**, and the computer program code form an embodiment of processing means for carrying out the embodiments of the invention. In another embodiment, the at least one processor **1502**, the memory **1504**, and the computer program code form an embodiment of processing means for carrying out the embodiments of the invention.

[0095] Embodiments as described may also be carried out in the form of a computer process defined by a computer program. The computer program may be in source code form, object code form, or in some intermediate form, and it may be stored in some sort of carrier, which may be any entity or device capable of carrying the program. For example, the computer program may be stored on a computer program distribution medium readable by a computer or a processor. The computer program medium may be, for example but not limited to, a record medium, computer memory, read-only memory, electrical carrier signal, telecommunications signal, and software distribution package, for example.

[0096] Even though the invention has been described above with reference to an example according to the accompanying drawings, it is clear that the invention is not restricted thereto but can be modified in several ways within the scope of the appended claims. Therefore, all words and expressions should be interpreted broadly and they are intended to illustrate, not to restrict, the embodiment. It will be obvious to a person skilled in the art that, as technology advances, the inventive concept can be implemented in various ways. Further, it is clear to a person skilled in the art that the described embodiments may, but are not required to, be combined with other embodiments in various ways.

1. A method, comprising:

causing a station capable of communication in a wireless network to acquire knowledge of a medium usage indicator with respect to at least one channel applicable for transmission of a scanning request; and

determining a transmission time for a next scanning request at least partly based on the medium usage indicator.

2. The method of claim **1**, further comprising:

transmitting a first scanning request before acquiring knowledge of the medium usage indicator.

3. The method of claim **1**, wherein the medium usage indicator is obtained from an access point of the wireless network and/or determined based on at least one of the following: a transmitting or receiving time, a clear channel assessment, a network allocation vector.

4. (canceled)

5. The method of claim **1**, wherein the medium usage indicator comprises at least one of the following: a channel utilization ratio, a collision probability, a transmission probability, a medium access control (MAC) service time, a queue length, a MAC delay, a packet loss rate, throughput efficiency, and a number of retransmission attempts.

6. The method of claim **1**, wherein the determination of the transmission time for the next scanning request comprises:

determining a scanning request transmission interval at least partly based on the medium usage indicator; and