## Chapter 2

* A number of examples are presented in this chapter to illustrate the proposed event definition / evaluation language, e.g. GEM and JECTOR. Most of the examples are not explained, at least not satisfactorily. While I understand that this chapter is mainly intended at providing a review of the previous works, nevertheless the lack of appropriate explanations makes examples difficult to understand. Hence, they become pointless (and could be even removed):

More explanations have been added to these sections. In particular, for the section on event definition, yeast is studied because of its distinct feature in expressing temporal relations while those works in active database provide a generic model in expressing complicated relations among events.

For the section on event evaluation, works like EPS and SIENA are related but they have not addressed the issues facing WSN. GEM is more related because it provides a more generic rule-based framework. It inspired the design of the event detection framework for PSWare.

For the section on event operators, I’ve added a short discussion in the beginning of the section. The purpose for this part is to summarize the existing event operators / functions so that we can have an idea on what types of operators / functions PSWare should support.

* Similar remarks apply to examples in Figure 2.10 and Figure 2.11.

Figure 2.10 is for a related work named q-digest. More explanation has been added to explain the figure and its relevance. In essence, q-digest tries to balance the trade-off between accuracy and storage by summarizing some part of the data. Such trade-off is actually an important concern in WSN when resource constraint is considered.

Figure 2.11 is another related work similar to q-digest. More explanation has been added. This work is actually an improvement over q-digest in the sense that it not only tries to balance the trade-off between accuracy and storage but also tries to balance the weights among different nodes in the network. As a result, this work is also highly relevant if we consider all sensor nodes in the network as even.

* Page 108: it should be explicitly stated that the message cost is related to energy consumption. Otherwise, the objective of reducing energy consumption is not well justified.

I have added a remark for clarifying that we only consider message cost in our energy consumption.

* Page 108: how is the message cost defined?

A short description has been added: message cost is the number of hops for the event to be delivered from the event source to its destination. Such destination could be an event fusion point (fusion point will be discussed in the later sections) for detecting higher level composite events or the sink node where the events will be delivered.

* Page 112-114: this part is unclear to me. Formulae derived in this section are not adequately justified. This makes understanding almost impossible.