

CHALLENGE INVESTIGATION VOTING PROCEDURES FOR A BWC COMPLIANCE REGIME¹

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Background

Whatever the procedure for launching challenge investigations under a BWC compliance regime, it should both deter frivolous requests and at the same time prevent reasonable requests from being blocked by political considerations. It ought to investigate well-founded suspicions and avoid inconveniencing institutions that comply.

There are two general procedures, dubbed "red-light" and "green-light" under consideration for denying or approving requests by states parties for challenge investigations under a BWC compliance regime.

Under a red-light procedure, the investigation will automatically proceed unless a specified percentage of the BWC Executive Council votes "no" to deny the request -- because it is lacking substantiation, out of the scope of the BWC, frivolous, or politically motivated. The Chemical Weapons Convention will employ a red-light procedure with 75% vote of the whole Executive Council needed to deny the request and stop the investigation. The identical procedure has also been proposed for the BWC Compliance Regime.

In a green-light procedure, the investigation will not proceed unless a specified percentage of the Executive Council votes "yes" to approve the request--because it is based on adequate evidence. Requiring a low vote percentage to approve the request would mean that the concerns of a single State Party would have to be validated by others, but the request for an investigation could not readily be denied. One green-light procedure under discussion for the BWC Compliance Regime specifies a 50% vote of the whole Executive Council to approve the investigation request.

The vote percentages under consideration, in either mode, are based on the entire membership of the Executive Council. Thus, the outcome could be determined by abstentions based on political factors having nothing to do with the situation at hand, and by absences at the time of voting.

Red-light and green-light procedures can be very far apart philosophically and politically. For example, under a 75% green-light procedure, a challenge investigation would not be approved if 26% of the Executive Council were to abstain or were absent; and under a 75% red-light procedure, a challenge investigation would automatically be approved if 26% of the Executive Council were to abstain or were absent. Depending on whether the procedure is red- or green-light, there are clearly opposite effects of abstentions on the outcome of requests for challenge investigations. In the red-light procedure, *an abstention is the same as a vote to approve a request for an investigation*. In contrast, in the green-

light procedure, *an abstention is the same as a vote to deny the request for an investigation.*

The Problem with Abstentions and Absences

The red-light and green-light procedures under discussion for the BWC require vote percentages based on the whole Executive Council. All such procedures are at the mercy of abstentions and absences. Abstentions or absences, which may result from uncertainties in the evidence and from political alliances and opposition to the challenged State Party, make it less likely that an investigation request will be approved under a high-percentage green-light procedure and less likely that an investigation request will be denied under a high-percentage red-light procedure.

For 75% green-light, for example, if only 15% of the Executive Council abstain due to uncertainties in the evidence and 15% abstain because they are allied with the challenged State Party, a request of high merit would be denied. For 75% red-light, if only 15% of the Executive Council abstain due to uncertainties in the evidence and 15% abstain because they are adversaries of the challenged State Party, a request of little merit would be approved. In some situations, Executive Council members can avoid responsibility by simply not responding. These problems can be eliminated in both red- and green-light procedures by basing vote percentages only on those members of the Executive Council who actually vote and permitting both "yes" and "no" votes to be cast.

Advantages of Basing Percentages on Those Who Actually Vote

Based on recent histories of different types of United Nations General Assembly votes, abstentions range from 0% to 50%, which makes uncertain the meaning of any voting procedure that includes them in its calculations. For UN votes of different types, the average percentage abstentions range from 16% to 22%, with the highest average for resolutions that criticize a nation or groups of nations.

Because challenge investigations are sensitive and because of time pressure, abstentions may be considerably higher than the averages for our samples of UN general assembly votes. The data summarized here on abstentions in recent UN votes, the possibility that abstentions may be even higher in challenge investigation voting, and the opposite effect of abstentions on red- or green-light voting procedures all argue for adopting a voting procedure that minimizes the effect of abstentions.

When percentages are based only on those members of the Executive Council who vote, and both "yes" and "no" votes can be cast, the percentages of "yes" and "no" votes add up to precisely 100% (Unlike votes based on the whole Executive Council, where the sum of "yes" and "no" percentages is less than 100% because abstentions depress both). This has important political implications, as it means that any green-light procedure is equivalent to its complementary red-light procedure. For example, a 30% green-light procedure is equivalent to a 70% red-light procedure, a 40% green-light procedure is equivalent to a 60% red-light procedure, a 50% green-light procedure is equivalent to a 50% red-light

procedure, etc.³. Thus, differences between red-light and green-light procedures have been eliminated. Furthermore, basing percentages only on those who vote should encourage voting since abstentions have no effect on the outcome. As a result, investigations based on strong evidence are more likely to be approved and investigations based on weak evidence are more likely to be denied.

We have performed simulations of challenges with various hypothetical Executive Councils and alliances. These revealed additional advantages of basing percentages only on those who actually vote. The Excel and Visual Basic computer programs developed for this project are available from Lynn Klotz (telephone: 617-623-6375; e-mail: lynnklotz@compuserve.com) to those who wish to carry out their own simulations.

The simulation results indicate that all red-light and green-light procedures, regardless of percentage chosen to approve or deny an investigation, are more responsive to the evidence of a BWC violation when abstentions and absences are ignored. That is, it is more likely that investigations based on strong evidence will be approved, and it is more likely that investigations based on weak evidence will be denied. In conclusion, the above analysis indicates that basing percentages only on those who actually vote, and permitting both "yes" and "no" votes to be cast, are superior to percentages based on the whole Executive Council.

End Notes:

1. A slightly different version of this paper appears in "The CBW Conventions Bulletin," Issue No. 41, September 1998, p.1.
2. Lynn C. Klotz is Chair, Subgroup on Industry Concerns, Federation of American Scientists Working Group on Biological Weapons Verification. Mark C. Sims recently received a Masters of Theological Studies from Harvard Divinity School. He also holds a BS in Physics from Duke University.
3. A simple arithmetic demonstration of these concepts may be helpful. The effect of abstentions on voting procedures is most easily demonstrated by looking at the arithmetic of calculating percentages. To that end, let y = number of votes to approve (yes votes); n = number of votes to deny (no votes); a = number of abstentions plus absents. Therefore, $y+n+a$ = number on the Executive Council.

In most procedures currently under discussion for the BWC, percentages are based on votes of the whole Executive Council. Specifically, those percentages are calculated as follows: $G(\text{whole}) = y/(y+n+a) \times 100$ (percent green-light vote); $R(\text{whole}) = n/(y+n+a) \times 100$ (percent red-light vote). The two percentages do not add to 100%. Specifically,

$R(\text{whole}) + G(\text{whole}) = 100 - \% \text{ abstentions} < 100$. Since the number of abstentions are in the denominator of the percentage formulas above, they will depress both green-light and red-light vote percentages, leading to opposite political effects. That is, abstentions make *less* likely an investigation will be launched under a green-light procedure, and

abstentions make *more* likely an investigation will be launched under a red-light procedure.

In comparison, where percentages are based on only those members of the Executive Council voting: $G(\text{only those voting}) = y/(y+n) \times 100$; $R(\text{only those voting}) = n/(y+n) \times 100$. Here, the two percentages do add to 100%. Specifically, $R(\text{only those voting}) + G(\text{only those voting}) = 100$. Thus, any green-light procedure is identical to its complementary red-light procedure.