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**ENSURING AVAILABILITY AND SUSTAINABLE MANAGEMENT  
OF WATER AND SANITATION FOR ALL**

**Post-certification: an innovative post-project sustainability  
approach to maintain WASH rural services**

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*The Democratic Republic of Congo is one of the sub-Saharan African countries that have not reached the Millennium Development Goals (MDGs) in water and sanitation despite massive efforts undertaken over the last fifteen years. To accelerate access to WASH services, UNICEF and government partners have been implementing the National 'Healthy Villages and Schools' Programme since 2008. It underwent a major reshaping in 2013 following a sustainability study that demonstrated that only 2% of villages had maintained their healthy status. A new post-certification support and monitoring component was put in place, including 'catch up' activities, which would allow the programme to re-certify villages and schools where the healthy status has been lost. This innovative approach continuously monitors WASH status, assuring the long-term sustainability of outcomes. Lessons learned, both in terms of results and methodology, can be identified from this critical sustainability measure and shared with the WASH community.*

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## **Introduction**

The Democratic Republic of Congo is one of the sub-Saharan African countries that have not reached the Millennium Development Goals (MDGs) in terms of water and sanitation. In order to achieve the Sustainable Development Goals (SDGs) by 2030 major efforts are required on the part of the government of DRC and the financial and technical partners. 31% of the rural population has access to improved water services, while only 29% of the rural population has access to improved sanitation facilities (UNICEF/WHO, 2015). A result of these low access rates, diarrhoea is reported as the cause of death for 14% of children under five years old (EDS, 2014). To improve access to WASH in rural areas, the Ministry of Public Health (MoH), the Ministry of Education (MoE) and UNICEF are implementing the National 'Healthy Villages and Schools' Programme (VEA in French- "*Villages et Ecoles Assainis*") since 2008.

Sustainability became a growing concern of the MoH, MoE and UNICEF DRC after the completion of a sustainability study in 2013 which demonstrated that the Phase 1 design of the VEA programme was not able to provide an environment in which villages and schools could maintain their healthy status as defined by the seven norms (Hydroconseil, 2013). To address the sustainability of interventions in Phase 2, an innovative post-project sustainability approach was introduced to maintain access to WASH services in rural villages and schools over time.

Considering that sustainability of WASH interventions is a top priority for WASH practitioners and that after a number of years of intervention, WASH services are barely maintained (Lockwood, Bakalian and Wakeman, 2003), external follow up and support is increasingly being recognised as a critical factor for ensuring post-project sustainability (Lockwood, 2002, IRC, 2003). In this sense, the approach implemented by UNICEF DRC and government partners could be an important source of lessons learned for the WASH community. While the programme targets both schools and villages, this paper will focus on the approach, main results and lessons learned for the village component.

## **VEA Programme**

Since 2008, the National "Healthy Villages and Schools" Programme has been implemented with the support of its partners, notably DFID, in two phases: from 2009-2012 and from 2013-2017. While the

objective of Phase 1 was to ensure that 3,500,000 people and 240,000 school children receive access to improved WASH services, Phase 2 has been focused on scaling up operations to reach a total of 4,050 000 people in 6,000 villages and 475,000 students in 1,250 schools.

Currently being implemented in the rural and peri-urban communities in 22 of the 26 provinces of DRC, the VEA programme provides a comprehensive package that includes water and sanitation interventions, hygiene promotion and behaviour change activities, and capacity development. The programme is based on a key concept encouraging communities to become a “Healthy Village” by meeting or exceeding the minimum standards for water, sanitation and hygiene that a village must reach before it can be called “healthy”. Using a community -driven and community-led approach, people are motivated to reach this goal and attain a healthier environment within their village. For a village to be certified as healthy, a set of “norms” have been developed and agreed by the Government of the DRC (see tables below).

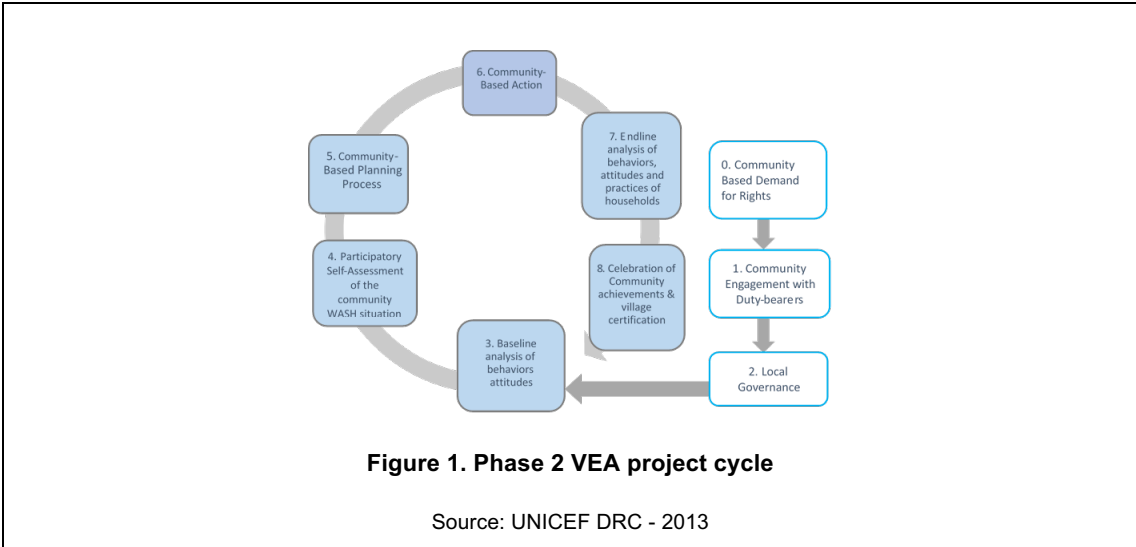
**Norms for “healthy villages”**

A village is certified as “healthy” when it meets the following standards:

1. The village has an active gender balanced health committee and/or an active WASH committee
2. At least 80% of the population has access to clean water
3. At least 80% of households have access to hygienic latrines
4. At least 80% of households dispose of their solid waste hygienically in a pit
5. At least 60% of the population washes their hands with soap or use ash before preparing food or eating and after latrine use
6. At least 70% of the population understands the faecal-oral route of disease transmission and how to prevent it
7. The village is cleaned at least once a month by the community

To achieve the programme norms, the project cycle (referred to as the “Step by Step” approach) has been developed based on the principles of the human-rights based approach (HRBA) and the Participatory Hygiene and Sanitation Transformation (PHAST) methodology. Knowledge, Attitudes and Practices (KAP) surveys at the beginning and at the end of the project cycle determine respectively the scope of the community work plan and fulfilment of the norms.

The programme supports the technical services of the two ministries (health and education) to manage and coordinate the project, with additional support of implementing partners such as NGOs or private sector enterprises. The interventions of the programme take place on five levels: i) national level (central government); ii) provincial level (provincial government and deconcentrated technical services); iii) health zones/ district level; iv) health areas; and most importantly v) at the community level (villages and schools).



## Introduction of the post-certification component

A sustainability survey was conducted at the end of Phase 1 (Hydroconseil, 2014) to assess the sustainability of WASH interventions undertaken by the VEA Programme and to improve the design of Phase 2. This study was conducted in all provinces with a sample consisting of 354 villages distributed in proportion to the number of villages with the Healthy Village status in the provinces.

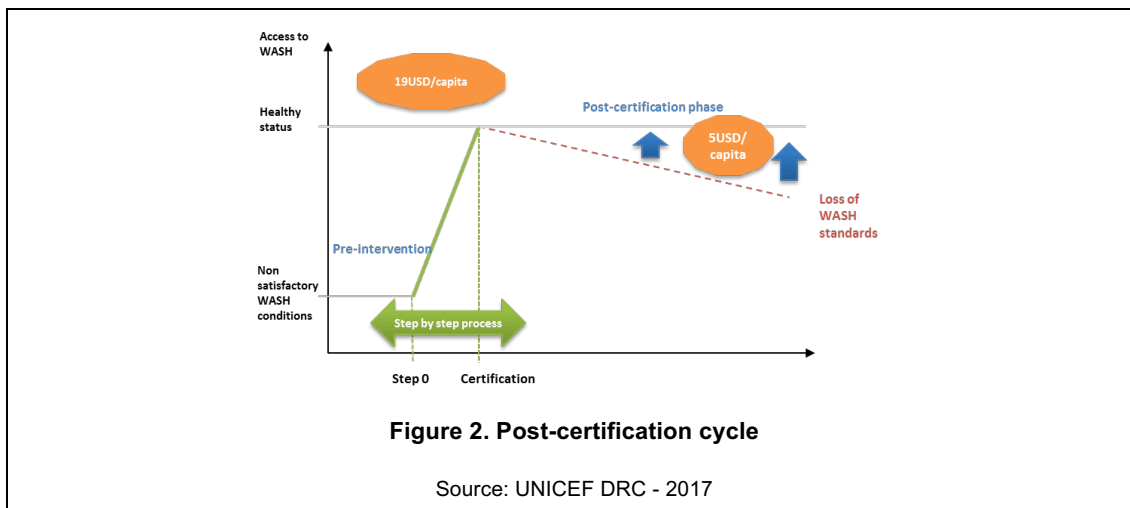
This survey established that only 2% of villages maintained their healthy status over time, meaning that 98% of villages had lost at least one of the seven norms. Access to water was well maintained (83,5%) while norms relating to behaviour change such as hand washing were the most easily lost over time with only 30% of villages maintaining good hand washing practices. As such, one of the main recommendations of this study was to develop a post-certification strategy in order to allow villages to maintain or regain their healthy status after the intervention. By doing so, the programme's Phase 2 aims to not only scale up new results in 2013-2017, but also to ensure improved quality and sustainability of Phase 1 and Phase 2 results.

Recommendations have been translated into practice and the project cycle from Phase 1 has been modified for Phase 2 to include, for both Healthy Villages (VA) and Healthy Schools (EA), post-certification support and monitoring. Once the "Step by Step" project cycle is completed through certification, the village or school enters the post-certification cycle. Local MoH and MoE actors conduct regular external visits with post-certification KAP surveys to determine whether villages or schools maintained their status. Each village and school must receive at least one post-certification visit per year to continuously monitor their WASH standards. For villages which have lost their "Healthy" status, a catch-up or "*rattrapage*" plan is developed and put in place by the health zones team in order to regain WASH standards. Thus, done correctly, a community can identify where exactly the problems lie in their village or school with regard to WASH, discuss them, and then define a plan for improvements (or to maintain standards). This is the core of the community-driven cycle aimed to encourage sustainability.

For communities still meeting healthy norms following a post-certification KAP survey and self-evaluation, the health zone workers proceed with the re-certification of the village and school, marked by the celebration of "healthy anniversaries". The health zone team works closely with the community to update their maintenance plan in addition to sending timely inputs on the status of the village to the VEA database. Data of all KAP surveys are captured in the District Health Information Software (DHIS2) used by the VEA programme for routine reporting.

This post-certification strategy is innovative compared to other initiatives such as sustainability checks (Godfrey et al. 2009) as monitoring is internalized and managed directly at the community level, impacting level of investment per capita – it is estimated that post-certification costs USD 5 per capita against the USD 19 invested during the certification process. This lower level of investment is also ensured by the fact that solutions are at first sought at community level to maintain water points. The committee is responsible for ensuring that financial resources for rehabilitation of the water point are available. When the reason for the breakdown of the water point goes beyond their capacity to respond (in terms of responsibility, maintenance, and financial capacity), UNICEF can provide a one-time external response to the problem. In doing this, UNICEF is strengthening of the accountability framework for sustainable services with the development of a network of competent local actors capable of meeting the demands for spare parts and the private sector in order to provide quality maintenance as an effective way of resolving issues at water point level.

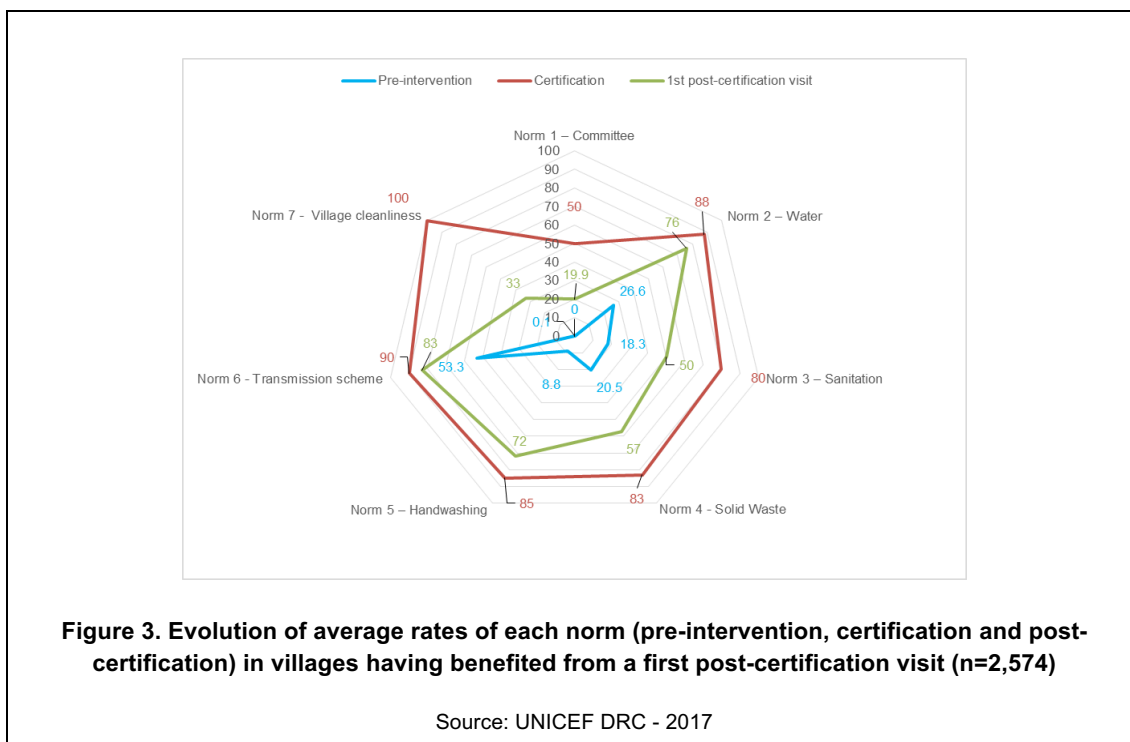
Overall, the post certification phase includes both the 6,000 new villages and 1,250 schools certified in Phase 2 as well as the 3,250 villages and 1000 schools certified in Phase 1 to ensure the sustainability of all the 2008-2017 interventions.



### Sustainability of WASH interventions

Post-certification effectively started in early 2015. So far, 3,183 villages have received a first post-certification visit of which 8.6% maintained their healthy status, confirming that villages need continuous support to maintain good WASH practices and a healthy environment. 22% maintain access to water and to sanitation according to programme standards and 39% maintained at least 4 norms.

Data available allows for a detailed analysis on the norms that were the most lost and the associated challenges. The most important setbacks are observed for Norm 1 – committee, Norm 7 - village cleanliness and Norms 3 and 4 related to sanitation at household level, both liquid and solid (Figure 3). On the other hand, programme achievements have been quite strong for Norm 5 (understanding of faecal-oral route of disease transmission) and Norm 6 (handwashing with soap), suggesting that sensitization activities at the village level are effective. Although significant setbacks can be observed on some of the WASH standards, none of the villages returned to their pre-intervention status, thus confirming a certain degree of programme effectiveness.



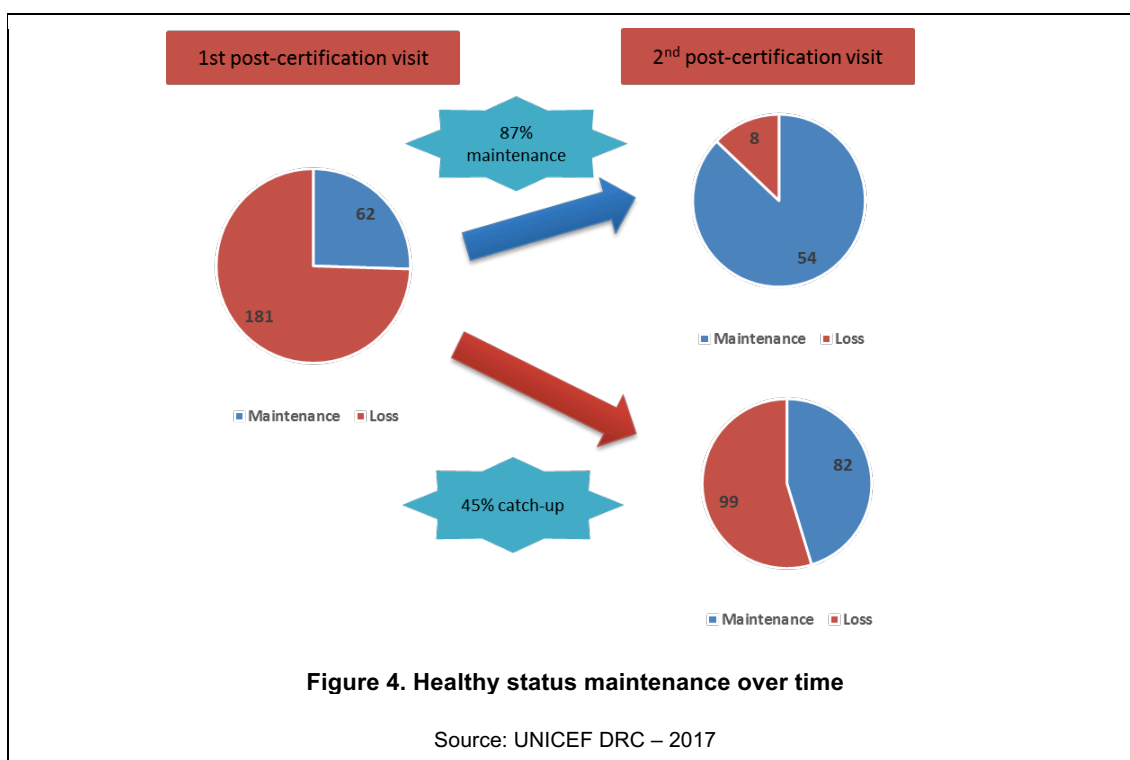
The existence of a dynamic committee is the norm that experienced the largest loss among the seven, with only 19% of villages maintaining it. The capacity of committees is one of the key post-project issues to ensure sustainability of WASH interventions (Sara and Katz, 1997). As the VEA is based on a community driven model, it is important to focus on the capacity of the community itself to maintain a healthy environment. Strengthening village committees must be an important area of work for health zones during the implementation of catch-up work plans. This includes continuous capacity building of committees by health zones team to ensure the maintenance of facilities and spreading of messages on good wash practices as well as ensuring involvement of women in the committee. Village cleanliness (Norm 7) depends on community dynamics and can be easily regained through effective community leadership. Numerous examples show that the revitalization of committees improves the organization of collective work at the village level (so called “salongo”) and promotes the effective catch up of this norm.

The main challenges associated with maintaining these WASH standards are more related to community dynamics rather than investment in infrastructures - Norm 2 is one of the most maintained norm with 70% of villages maintaining satisfactory access to water. In many cases, minor reinvestments in infrastructures should be sufficient to ensure that most villages maintain their healthy status over time. Experiences from current post-certification activities in Kinshasa province has shown that community mobilization is possible with the support of health zones to ensure minor repairs. Among all villages visited during post-certification that have lost Norm 2-access to water, half of them have repaired water points without external financial support. However, this has to be balanced with the fact that 81% of the villages do not systematically contribute to the maintenance of water points (Hydroconseil, 2016), which could ultimately hinder the management of minor repairs by communities themselves.

While first post-certification visits are a key step in the post-certification approach that aims to verify WASH standards, the effectiveness of catch-up plans can only be confirmed after the second post-certification visits are undertaken at the village level. To date, 243 second post-certification visits have been carried out in 10 provinces. Even though this is a relatively small sample, some preliminary conclusions can be drawn.

Based on the data analysis from certification and first and second post-certification visits, 62 villages maintained their status at PC1 (25%) among this sample of 243 villages. 87% of these villages still maintain their status after PC2. Among the 181 villages (74%) that lost their status at PC1, 54% of them regained it after PC2 (see Figure 3). Overall, 44% of villages maintained or regained their healthy status at the second post-certification visit. This is higher than the target as it was expected that 40% of villages maintain or regain their healthy status in 2016. Of the 99 villages (44%) that did not meet the healthy status neither at the first post-certification visit nor the second, only 22% did not have sufficient access to water (Norm 2 less than 80%) while 86% did not have a dynamic committee. This suggests once again that the main bottlenecks to regaining status are not necessarily related to infrastructure, but to community dynamics.

Although the sample is too small to formulate definitive conclusions, this positive change between first and second post-certification visits demonstrates the performance of catch-up/maintenance plans to regain or maintain a healthy status and tends to confirm the programme theory of change. A similar analysis will need to be conducted on a broader sample as the post-certification phase evolves in order to formulate stronger conclusions.



## Conclusion and next steps

UNICEF intends to foster innovative ways of ensuring sustainability in its 2016-2030 Strategy (UNICEF, 2016). Post-certification as designed in DRC is innovative in terms of methodology and has thus far shown to be an effective post-project sustainability approach to monitor and regain access to WASH services in rural areas. Preliminary results confirm that the approach is effectively low cost, though this will have to be confirmed as more villages enter the post-certification phase and begin implementing catch-up plans.

However, despite promising results, the scaling up of this post-project approach to sustainability is facing some challenges. The implementation at local level is encouraging although still insufficient with regard to targets: the 3,183 villages in the post-certification phase to-date represent only 53% of villages certified between 2008 and the end of 2015. Efforts have to be sustained to scale up the post-certification approach and ensure continued monitoring of WASH conditions at the community level.

Post-certification remains a new strategy on the programme which is still being integrated into larger programme routine. The main bottlenecks which explain the restricted scale up of the approach include a lack of understanding and ownership of the post-certification strategy at local level, as well as a lack of follow-up after the completion of the first post-certification visits, as 61% only of villages are implementing catch-up plans (Hydroconseil, 2017). Ultimately, simultaneous scale-up of the programme in Phase 2 and the introduction of innovations such as post-certification have created a significant workload on health zone actors. Although training and coaching strategies have supported health zone teams in strengthening planning and the application of Phase 2, it is likely that health zone actors will continue to require support in the future. It is thus recommended that effective planning and follow-up with health zones actors be maintained by UNICEF to ensure quality processes and effective outcomes at the village level.

Overall, one of the biggest challenges is social sustainability and the programme should strengthen support provided to communities with respect to sustainable behavior change at all levels: for the individual, household, and the community. The health zones teams have a major role to play to support communities in this respect.

The DRC experience can certainly help WASH actors operating in similar context design such internal mechanisms that could provide continuous monitoring of WASH interventions at the field level, assuring the long-term sustainability of the outcomes.

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### **References**

- Enquête démographique et de santé, République Démocratique du Congo, 2013-2014, Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité et Ministère de la Santé Publique
- GODFREY S., FREITAS M., MUIANGA A., AMARO M., FERNADEZ P., SOUSA MOSIES L., “Sustainability check: A monitoring tool for the sustainability of rural water supplies”, 34<sup>th</sup> WEDC International Conference, Addis Ababa, Ethiopia, 2009
- HYDROCONSEIL, *Etude de fin de cycle de la Durabilité Programme National Village Assaini & Ecole Assainie – Phase I*, July 2014 (unpublished)
- HYDROCONSEIL, *Rapport sur les goulots d’étranglement*, Janvier 2017 (unpublished)
- LOOCKWOOD H., “Institutional Support Mechanisms for Community managed Rural Water Supply and Sanitation Systems in Latin America”, EHP Strategic Report No. 6, December 2002
- LOOCKWOOD H., BAKALIAN A. and WAKEMAN W., “Assessing sustainability in rural water supply: the role of follow-up support to communities, Literature review and desk review of rural water supply and sanitation project documents”. Washington, DC: World Bank, 2003
- IRC Thematic Group on Scaling up of community-managed rural water supply, [www.irc.nl/scalingup2003](http://www.irc.nl/scalingup2003)
- UNICEF, Strategy for Water, Sanitation and Hygiene 2016-2013, 2016
- WHO/UNICEF (2015) Progress on Sanitation and Drinking Water, 2015 Update and MDG Assessment
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